NORTH BY NORTHEAST: TOWARDS AN ASIAN-ARCTIC REGION

Mia Bennett

Scott Polar Research Institute
University of Cambridge

Supervisor
Michael Bravo

Submitted in support of the degree of
MPhil, Polar Studies

2013
(Submitted 13 June, 2013)

Table of Contents

Acknowledgements

I would like to express my heartfelt appreciation to Dr. Michael Bravo for the many patient hours he spent discussing the Arctic with me. His creativity and imagination has inspired me to think about the Arctic in new ways.

I wouldn't be at SPRI without the help of the Gates Cambridge Trust, to which I am eternally grateful for providing me with the means to receive a wonderful education at this university. The Trust, along with Fitzwilliam College, has also been unwaveringly supportive in my travels to conferences near and far.

I'd also like to extend my gratitude to Dr. Piers Vitebsky, who was also kind enough to sit down with me to discuss my ideas. Of course, he's also the author of *Reindeer People,* a book I find truly inspirational. Dr. Olga Ulturgasheva's seminars on Siberia were also incredibly thought-provoking.

Dr. Larry Smith, Dr. John Agnew, and Dr. Michael Shin, thank you for inspiring me to study geography, and for providing me with letters of recommendation and endless amounts of advice and support. I'll see you in Los Angeles soon!

To the SPRItes: Grant, TJ, Dave, Johnny, and Ed – thanks for making the Second Floor Research Library a hysterical place to work. And for eating all of my cookies (they're definitely cookies – let these Acknowledgements be the last word on that). Roman, Evan, Remy, and Nick, thanks for livening up teatime (and the Cambridge Beer Festival).

To all of SPRI: thanks for the Russian Transportation section in the library, the thousands of cups of tea, the occasional biscuit, and, well, for simply being the chillest department in Cambridge.

To all the inspirational people I've met in this rainy corner of the world: Pancho and Ben, thanks for being some of my first friends in Cambridge and for making H-Block the best – and for helping me make my ideas understandable to people whose heads aren't constantly in the Arctic clouds. Timothy, thanks for really stretching my mind and for actually going back to make sure our t-shirts would match in the (indie) club.

TK, thanks for being my best friend, reading my dissertation, and understanding my jokes about Danish accents and Yakutia Airlines. If it's Wednesday, it must be Khabarovsk!

Mom – thanks for always being there for me through thick and thin (and for the infinite amounts of gelato in Italy). Dad and Tess, thanks for your steadfast support. Norbu and Genji, thanks for always barking into the phone when I called home, making sure to leave no doubt that I could hear you 5,000 miles away.

So in sum: At times, I wanted to cry me a river; I felt as if I was losing my way. Never again did I want to write, though it seemed I'd have to until the end of time. Staring at the computer screen for hours on end would give me tunnel vision. But SPRI formals made everything better: I'd be that girl with a dress on, while the boys looked good in a suit and tie. And now, I'm going to take off in my spaceship coupe and head for Los Angeles. Let's take a ride, señorita!

List of Figures

List of Abbreviations

CCTV	China Central Television
DEW	Distant Early Warning
EU	European Union
FTA	Free trade agreement
IPY	International Polar Year
ITK	Inuit Tapiriit Kanatami
KOPRI	Korea Polar Research Institute
LNG	Liquefied natural gas
NATO	North Atlantic Treaty Organization
NSR	Northern Sea Route
FPSO	Floating production storage and offloading
PRL	Polar Research Laboratory
R&D	Research and development
SOA	State Oceanic Administration
UNCLOS	United Nations Convention on the Law of the Sea

Abstract

Mia Bennett

North by Northeast: Towards an Asian-Arctic Region

Scott Polar Research Institute
University of Cambridge
June 13, 2013

Keywords: Arctic, Pacific, China, Japan, Korea, science, region, flows, territory

While the Arctic is on the front lines of climate change, it is also on the front lines of experiments in governance. Chinese, Japanese, and Korean interest in the Arctic is pressuring the Arctic Council, the region's preeminent multilateral organization, to reconsider how it cooperates with states traditionally perceived as non-Arctic. The seafaring states of China, Japan, and Korea have commercial interests in the Arctic involving shipping, hydrocarbons, and fisheries. Yet questions of identity and power projection are also paramount, as the Arctic allows the Northeast Asian countries to display their growing capabilities through scientific endeavors and maritime transits. Several of the Arctic Council's member states, namely Canada and Russia, assertively promote national sovereignty and territorially-ascribed sovereignty in the region. But networks and relations are crucial aspects of activities in the circumpolar north, especially when scientific collaboration and natural resource extraction require large amounts of capital and cooperation. Flows of capital, goods, and people are connecting Chinese consumers with mineral deposits in Greenland and Korean engineers with Russian oil oligarchs. At the same time, these flows do not mean that we should constrain our thinking about the Arctic to one side of the territory-network dichotomy. China promotes the Arctic as a global commons while it simultaneously claims to be a near-Arctic state, revealing the tension between privileging flows and territory in the circumpolar north. I analyze trade statistics, rhetorical framings, and scientific endeavors to understand how the Northeast Asian countries are turning their interests in the Arctic into national identities and how economic interests in the North Pacific – the Arctic near abroad of China, Japan, and Korea – could eventually translate into region building measures and even regional identities.

The weather becoming clear, we had the opportunity of seeing, at the same moment, the remarkable peaked hill near Cape Prince of Wales on the coast of America, and the East Cape of Asia.

> – Captain James Cook, *A Voyage to the Pacific Ocean* (1784)

Time and space are annihilated. We are of the world now.

> –Yukon Commissioner William Ogilvie messaging Ottawa upon the completion of the Yukon Telegraph line (1901)

Chapter One

Introduction

At Russia's Sakhalin-II project, 15 degrees south of the Arctic Circle, a Korean-built drilling and production platform is extracting liquefied natural gas (LNG) from under the Sea of Okhotsk. The LNG will flow through Japanese-made pipes before export, with nearby Japan and Korea the largest customers.[1] Although Sakhalin-II is south of the Arctic Circle, due to the harsh operating conditions, oil and gas corporations mention it in the same breath as projects like Shtokman in the Barents Sea north of Russia and the proposed Yamal project in northwestern Siberia. This cooperation between Japan, Korea, and Russia in the energy sector is occurring in the sub-Arctic, where the three countries' borders, along with those of China and North Korea, meet. In this dissertation, while I aim to discuss Asian interest in the wider Arctic, I hope to demonstrate that the concept of the Arctic region itself should be reconsidered to include Northeast Asia and the North Pacific. Enhanced region-building measures within the North Pacific, combined with a more expansive conception among the states with territory north of the Arctic Circle of what the larger "Arctic" region constitutes, could foster more effective governance in a space that both the eight Arctic states and the Asian countries on their proverbial doorstep increasingly use.

It is first necessary to define "the Arctic" and the concept of "region." I do not view the Arctic through an essentialist lens that bounds the region based on the Arctic Circle or the Arctic tree line. I also seek to avoid defining the Arctic along political lines, such as the five littoral states of the Arctic Council or the eight permanent member states. Instead, I draw on the growing body of literature on network topology and relational networks by geographers (Amin, 2004; Coe, Hess, Yeung, Dicken, & Henderson, 2004; Macleod & Jones, 2007; Sheppard, 2002). Emphasizing connections and positionality, I consider how various areas within the Arctic fit into global flows and markets, particularly in Northeast Asia. I use this term to refer to China, Japan, and Korea.[2] These are the three Asian countries whose interests in the Arctic are the most developed, which I discuss in the second chapter. A relational view of the Arctic is useful because first, much of the Arctic is a maritime space. It flows into the Pacific and Atlantic Oceans, enabling the intermingling of both ocean currents and cultures.

[1] In 2007, contracts were signed that would send 64 percent of the LNG, 16 percent to Korea, and 20 percent across the Pacific Ocean to the United States (Gazprom, 2013a.), yet due to the shale gas revolution in the U.S., exports are probably more oriented towards Northeast Asia now.

[2] Singapore and India are two other countries with Arctic interests, though they are not as developed. Like

Second, the Arctic is increasingly a rhizomatic, networked space where melting sea ice and rising commodity prices are creating conditions that bring together scientists, fishermen, and investors from all over the world – especially Northeast Asia.

Although network topology is useful to understanding developments in the Arctic, I also argue for the continued importance of territory and proximity. In the third chapter, working in a tradition similar to O'Loughlin and van der Wusten (1990) in their research on the extent of a Europe-Africa panregion, I examine the idea of a panregion between Northeast Asia and the Arctic. The three Northeast Asian countries are heavily engaged in trade, shipping, and fishing in the North Pacific Arctic, an area that I argue constitutes their Arctic near abroad.

In the fourth chapter, I consider how China, Japan, and Korea are legitimizing their involvement in the Arctic. Paasi (1996, p. 804) suggests that an ideal critical regional geography would combine both politico-economic approaches and "questions of subjectification and identity formation." As such, I analyze how these three countries are building Arctic identities by emphasizing the Arctic's maritime materiality, promoting the Arctic as a global commons, and focusing on their national contributions to international polar science. China, Japan, and Korea are producing different visions from the Arctic Council member states of what Craciun (2009) terms "circumpolarity." Northeast Asian policymakers, whose countries are typically conceived as being outside the Arctic due to their lack of territory, are trying to demonstrate that their countries are in some ways already "inside" the region. China and Korea marshal international values such as global heritage to support their national interests in strengthening their economies. At the same time, countries like Canada are attempting to build a decidedly northern identity that spans the eight Arctic countries, creating a clear inside-outside dichotomy. Despite the desire of countries like Canada to act independently in the Arctic, the cost of northern industrial activities is often prohibitive. This makes international cooperation actually suit a country's national interest even if it might undermine its sovereignty.

In the fifth chapter, I make the case for Northeast Asian-led region-building efforts in the North Pacific. Whereas previously, Europeans led most excursions into the Arctic through the North Atlantic, a new hub of economic activity has emerged in the North Pacific driven partly by commodities cycles. No political activity, however, has yet complemented the increase in economic exchange. The Northeast Asian countries could, however, strategically legitimize their involvement in the larger Arctic not by speaking of the region as

a global commons open to all, but rather by basing their regional involvement on their activity in the North Pacific – their Arctic near abroad. Promoting region building in the North Pacific would align with the Arctic Council's current norms of ascribing legitimacy based on territory and, essentially, proximity to the North Pole. Furthermore, the global moment in Arctic governance, which reached its apex in the 1990s, has passed. In its place, there is a growing trend worldwide towards regionalizing maritime spaces. China, Japan, and Korea should move to assist a region-building effort in the nearby North Pacific and its surrounding landmasses through sub-national cooperation. Although some countries may resist the idea of viewing the North Pacific as an extension of the Arctic, reframing it as a unified northern margin of activity could support Asian activities in the wider circumpolar north. Taken as a social construct, a region is ultimately an "instrument for action" (Gilbert, 1988, p. 222). Emphasizing the connections of the North Pacific could improve regional governance in what is one of the most highly trafficked areas of the Arctic. It would also increase the confidence of the Arctic Council's member states that border the North Pacific, Canada, Russia, and the U.S – the first two of which are arguably the most concerned with Arctic sovereignty – in working with traditionally non-Arctic states in a cross-border maritime area.

Ultimately, I conclude that it is most helpful to think about the Arctic in expansive terms. We should not constrain our thinking about the Arctic to one side of the territory-network dichotomy. Networks can have hierarchies, hubs, and spokes, while territory often fixes international flows. As Amin and Thrift (1994, p. 2) state, "Globalisation does not represent the end of territorial distinctions and distinctiveness." The international flows imbricated in Sakhalin-II epitomize the relevance of both network topology and proximity to understanding the shape of the Arctic in the twenty-first century.

Chapter Two

Defining Chinese, Japanese, and Korean Interests in the Arctic

As the economies of China, Japan, and Korea continue to demand larger amounts of goods and resources, their governments are turning north in pursuit of shipping routes, hydrocarbons, and scientific research. Melting sea ice, rising sea levels and eroding shorelines are affecting more than the look of the landscape, for the materiality of a space shapes social interaction, mobility, and the possibility for conflict (Leitner, Sheppard, & Sziarto, 2008). Polar shipping routes are opening not just for littoral Russia and Canada, but for any country that seeks to use them. Meanwhile, sites for hydrocarbon and mineral extraction are attracting investment in Siberia and Greenland from foreign mining companies in places like Australia and Korea. In that sense, the changing materiality of the Arctic is altering possibilities for collaboration and regional governance. New possibilities for conflict – and cooperation – are arising as countries normally considered non-Arctic states, namely China, Japan, and Korea, deepen their involvement in the circumpolar north. In May 2013, the Arctic Council, the region's leading intergovernmental organization, approved the applications of these three countries for permanent observer status, though not without a certain amount of resistance from Canadian and Russian quarters.[5]

While Asian interest in the Arctic has generated many headlines, China, Japan, and Korea have actually been involved in the region for decades, if not centuries. A deeply historical perspective traces the roots of the Yupik in Siberia and Inuit in Alaska, Canada and Greenland across the Bering Strait to Asia. Craciun (2009) notes that the intermixing of traditional categories of races and continents in the Arctic peoples of North America, Greenland and Eurasia perplexed European thinkers. It was, in fact, the "search for Cathay" that "inspired the earliest voyages of Arctic exploration" (Mills, 2003, p. 797), with hardened men like English explorer Martin Frobisher seeking Arctic shortcuts to Asia through. Today, a melting ice cap is making dreams of a trans-polar route connecting Asia, Europe, and North America a more tangible reality.

[5] It was uncertain whether Russia would agree to the admission of Asian observers until the last minute (Chernenko, 2013). Kuzman (2013), however, cites that Russian diplomats ultimately believed admitting the Asian countries was the best option for checking their Arctic ambitions.

Several authors have analyzed the interests and aims of Asian states in the Arctic. China has drawn the most attention (Chaturvedi, 2012; Hong, 2012; Jakobson, 2010; Lasserre, 2010; Wright, 2011), while researchers have also analyzed Japan (Coates & Hara, 2013; Tonami & Watters, 2012) and Korea (Coates & Hara, 2013; Lee, Park, Cho, & Kim, 2013). Jakobson and Lee (2013) and Manicom and Lackenbauer (2013) also provide useful overviews of the Northeast Asian countries' interests in the Arctic. Shipping, hydrocarbons, and scientific research are generally seen to be the main interests of the Asian states. As China, Japan and Korea are all are major shipping nations, the Northern Sea Route (NSR) is an attractive option for shortening the distance between Asia and ports in northern Europe by up to 40 percent (Emmerson, 2010). The Arctic Marine Shipping Assessment identified the possible transformation of these three East Asian countries into Arctic maritime nations as one of the most important developments in the Arctic by 2050 (Arctic Council, 2009). Shipping aside, with Japan and Korea in particular having few natural resources of their own, they seek to diversify their sources of hydrocarbon imports to the north, especially given that the high price of commodities has made Arctic resources affordable to develop and the geopolitical instability in the Middle East. Finally, as all three countries aspire to expand their influence on the international stage, involvement in global scientific efforts is perceived as crucial to demonstrating capability. When China sends an icebreaker full of researchers to the North Pole, Arctic countries and the media take notice.

I will first briefly describe the Arctic interests of China, Japan, and Korea, followed by an analysis of the extent of an Asian-Arctic region, which I find centers on the North Pacific. While a significant body of literature on Asian interests in Siberia and the Russian Far East exists (Goldstein & Kozyrev, 2006; Rozman, 2008, 2011; Trofimenko, 1989), this research has not been incorporated into an analysis of how these interests translate into Arctic aims or into a North Pacific region.

2. 1 China

China first became involved in polar science through the Australian Antarctic program in the early 1980s (Mills, 2003), underscoring the inherently collaborative nature in much of polar science. The Chinese Arctic and Antarctic Administration was established in 1981, and like its Korean counterpart, it first focused on Antarctica. China opened its Yellow River research station in Svalbard in 2004. Importantly, however, the country has also ventured into Arctic

social sciences. This is a field that the hard sciences often overshadow in the Arctic.[6] The polar social sciences division of China's Polar Research Institute has 16 affiliated research universities and institutes spread across the country (Yang, 2012). Chinese scientific efforts largely emanate from the public sector, which could explain some of Beijing's highly visible "big science" projects such as sending an icebreaker to the North Pole or trying to land taikonauts on the moon. Moreover, with a more authoritarian government than either Japan or Korea, it is easier for China to pursue a defined agenda in the Arctic, even though Deputy Foreign Minister Hu Zhengyue stated that China does not have an Arctic strategy (Kim & Blank, 2011, p. 70). A perceived linkage between science, national goals, and authoritarianism might be one reason why in a 2010 survey, respondents in every Arctic country except Russia ranked China as their "least preferred partner" in the Arctic.[7]

Aside from science, China has commercial interests in the resource-rich Arctic. Beijing has openly implemented a "Go-Out" policy that involves investing in foreign countries such as in Africa to gain access to key inputs and open new markets (Gill & Reilly, 2007). China's geopolitical pursuit of South-South cooperation might actually be ushering in a new type of South-North cooperation. The Arctic represents a natural extension in its quest for raw materials, particularly hydrocarbons and rare earth minerals from places like Greenland. Whereas Japan and Korea are particularly interested in the LNG resources of Arctic states, China, connected to the Eurasian landmass, has so far paid closer attention to supplies that can be shipped in from Siberia and Central Asia through a land-based pipeline network. In addition, overland trade between landlocked Heilongjiang and Russia's Amur region is particularly strong (Lasserre, 2003). Moscow has made serious efforts to build ties with China, a country that Russian Navy Commander Admiral Vladimir Vysotsky described in 2010 as "becoming our serious partner from both positive and problematical sides" (Kim & Blank, 2011, p. 313). But China may be turning more towards the seas in its search for Arctic resources and shipping routes, as the Arctic Ocean cuts 4,000 nautical miles off of the journey to both the European Union and the east coast of North America (Hong, 2012). Beijing, like Tokyo and Seoul, seeks to reduce its dependence on chokepoints like the Straits of Malacca and the Strait of Hormuz.

[6] Until recently, for instance, the humanities and social sciences were under-represented at SCAR conferences ("Conference," 2011).

[7] In the 2010 WDGF Canadian Arctic Survey, respondents in every Arctic Council member state except Russia overwhelmingly selected China as the "least preferred partner in dealing with Arctic issues." Russians ranked the U.S. first, Scandinavia second, and China third (EKOS Research Associates, 2011), showing that there might even be popular support for Northeast Asian cooperation, at least from Russian quarters.

In China, as in many of the Arctic countries, a combination of science, industry, media, and the government craft the country's polar interests. In summer 2012, Dongfeng Nissan (a heavy truck manufacturer), China Central Television (CCTV) and the State Oceanic Administration (SOA) jointly launched an expedition to the poles. The television program, "The Arctic Trail: Exploration Tour," which aired on CCTV's Geographic Science Channel, followed the expedition (Xinhua, 2013). This trip paralleled the more scientifically-oriented landmark fifth expedition of the Chinese icebreaker, *Xue Long*. These two expeditions could be compared to the eight-month deployment in 2012 of the British Royal Navy's ice patrol ship, *HMS Protector,* to survey and patrol Antarctica, and the widely broadcast 2013 "Coldest Journey" expedition of Sir Ranulph Fiennes to cross Antarctica unaided on skis during winter. China and the United Kingdom are far from the Arctic and Antarctica respectively, so publicized expeditions led by private citizens and the government are instrumental in fostering a polar identity and heritage.

While the Chinese media reports on the heroics of its polar explorers, scientists – especially those who are also government employees – connect the dots between Arctic sea ice melt and climate change felt at home. Huigen Yang, chief scientist of the International Polar Year (IPY) China Program and Chinese Polar Research Institute Director, expressed, "The Chinese public has understood the linkage between the unprecedented sea ice retreat in the Arctic Ocean in September 2007 and the heavy snow disasters that happened in southern China in January of 2008" (Yang, 2012). Demonstrating how identities are actively produced rather than being inevitable results of culture or the environment, Cheng Baozhi, a polar region governance expert, suggested in *The Beijing Review*, "Instead of playing up its navigation and resource interests in the area, China should emphasize its identity as a 'public goods provider' to non-state actors, like residents, local governments and enterprises and promote cooperation with them" (Baozhi, 2013). His statement also reveals the possibility for scale-jumping economic projects in the Arctic that transcend traditional state-state cooperation. As Baozhi is an employee of the Shanghai Institute for International Studies, a Chinese think tank that regularly consults with the central government, it is possible that Beijing will heed his recommendation. China may have already learned from the past failures of governments and companies in the Arctic states to prioritize human development. For instance, Canadian telecommunications company NorthwesTel's (2013) website explains: "1963: Canadian National Telegraphs is awarded a U.S. military contract to build a tropospheric scatterwave system for the Distance *[sic]* Early Warning (DEW) line. The

company immediately recognizes the project's potential for bringing reliable telecommunications to communities in Canada's Arctic." Improving communities came second to demonstrating northern military might. But Beijing may already recognize the importance of providing public goods to local residents in the first instance, especially now that indigenous peoples in Canada and Greenland have significant autonomy.

Although China may not have a dedicated Arctic strategy, central planning measures from Beijing point to the country's aspirations in the Arctic. The SOA's 2012 five-year plan deems China a "developing maritime power," calling for the country a to develop in the oceans a "more prominent strategic position in the provision of resources to protect and expand space for development" (ChinaAbout, 2013). The plan calls the *Xue Long*'s expedition an "important element" and mentions that a new icebreaker will be built to support polar expeditions operating 200 days out of the year (ChinaAbout, 2013). The SOA also aims to deepen China's polar scientific efforts, from glaciology to waterway surveys, while increasing international exchange of data. Given these concentrated efforts, China may soon have more polar capabilities than some of the Arctic states. For instance, the US currently has no heavy icebreaker in operation, as the *USS Polar Star and Polar Sea* are mothballed. Capabilities are important for China as it tries to increase its power-projection capabilities at sea. In a comment that echoes Halford Mackinder's heartland hypothesis (1904), Li Zhenfu, a professor at Dalian Maritime University and a prolific Chinese commentator on Arctic affairs wrote, "Whoever has control over the Arctic route will control the new passage of world economics and international strategies" (in Wright, 2011, p. 15). Geostrategic control in the Arctic may thus be more important for China than Japan or Korea.

2.2 Japan

Japan has a longer history of involvement in the poles than either Korea or China. It can claim participation in the "heroic age" of Antarctic expeditions thanks to Lieutenant Nobu Shirase's 1910 journey to the continent (Summerhayes, 2008). Japan's scientific involvement in the polar regions dates to the International Geophysical Year 1957-1958, and it set up its National Institute of Polar Research in 1973. The country established a polar research station on Svalbard in 1990, over a decade before Korea and China. It has also built a total of four icebreakers, with the Japan Maritime Self-Defense Force operating the current one, *Shirase*. Furthermore, in national perceptions and imaginary geographies, the Arctic is almost seen as

touching Japan. The southernmost extent of Arctic sea ice used to reach northernmost Hokkaido (NASA, 2009), but that is changing. An article in *Nashojio*, the Japanese edition of *National Geographic*, lamented the diminishing ice from the Sea of Okhotsk (McNicol, 2008). The melting ice could generate negative effects on the local biodiversity and tourism, as tourists come to frolic on the passing icebergs each winter McNicol, 2008).

The Japanese economy also consumes a vast amount of natural resources, many of which are found in large supply in the Arctic. First, as one of the world's largest seafood consumers, Japan has an interest in northern fisheries. Second, as the world's largest importer of LNG combined with the recent decision to move away from nuclear power in the wake of the 2011 Fukushima earthquake, Japan is attracted to the Arctic's hydrocarbons. The first LNG tanker ever to transit the NSR sailed from Hammerfest, Norway to Tobata, Japan in December 2012 (Gazprom, 2012), demonstrating how even if Arctic shipping routes do not replace the Suez Canal, they will still be useful for transporting northern resources to Asian markets. Japan sits astride the Great North Circle Route linking British Columbia and Alaska with ports on the coastlines of Northeast Asia, a point to which I will return in chapter five in a discussion of Asia's Arctic periphery.

Japan has strengthened its diplomatic efforts in the Arctic. It recently appointed an Arctic Ambassador, making it the second Asian country to do so after Singapore. This builds on its 2009 application for permanent observer status in the Arctic Council, approved in May 2013 along with the applications of the fellow Asian countries of China, Korea, India, and Singapore. Upon Arctic Ambassador Masuo Nishibayashi's appointment, Deputy Press Secretary Naoko Saiki stated, "Japan is, of course, located outside the Arctic region; however, as a maritime state and one that attaches great importance to global environmental issues, it needs to be appropriately involved in international discussions regarding the Arctic" (Ministry of Foreign Affairs of Japan, 2013). Despite the designation of an Arctic point person, the lack of horizontal cooperation in Japanese bureaucracy has impeded the creation of a coherent Arctic policy (Tonami & Watters, 2012). Still, adhering to multilateral regimes is important to Japan, which has asked to join any shipping regime on the Arctic (Okada, 2008). With its interests in fishing, oil and gas, and shipping, Japan seeks to have a voice in discussions over regulating maritime activities in the Arctic, whether at the Arctic Council, International Maritime Organization, or United Nations.

2.3 Korea

Korea does not stretch as far north as Japan, so the national perception of nearness to the Arctic is weaker. Despite its physical removal from the circumpolar north, three decades after Japan, Korea entered into polar research with the 1987 establishment of the Polar Research Laboratory (PRL), focused on Antarctica. In 2004, the PRL expanded to become the Korea Polar Research Institute (KOPRI), focused on both the Arctic and Antarctic. Korea, like Japan and China, has scientific aims and strategic interests in the polar regions. Korea's economic interests in the Arctic have their origins in former President Park Chung-hee's launch of the Heavy Chemical Industrialization program in 1973.[8] The country developed industrial technologies like shipbuilding, steelmaking, and petrochemical refinement, all useful in the Arctic. During the 1990s, several Korean companies in these industries developed ties with their Siberian counterparts (Lee, 1996). These industries were initially designed to modernize the country through export-oriented industrialization. Yet Korea's steelmaking and shipbuilding technologies have advanced to the point that they now facilitate the country's overseas power projection, as they are intimately connected to the Korean Navy. Its transition to a blue-water fleet has allowed it to participate in multilateral efforts such as combatting piracy off the coast of Somalia, which in turn helps to protect Korean shipping interests. In that respect, the NSR promises to be not just another trade route for Korea, but also a potential second lifeline should geopolitical tensions erupt in the Strait of Hormuz. With 99.8 percent of imports and exports by volume carried by ship (Cullinane & Song, 1998) and North Korea blocking access to continental Eurasia, Korea is essentially an island. It is vital for the country to be able to protect its shorelines and the routes that lead into and out of its ports.

Korea continues to win the most orders for high-value, technologically advanced ships in the world, making the growth of Arctic shipping a possible economic boon for the country.[9][10] Deepening his country's Nordic ties, former President Lee Myung-bak visited Greenland and Norway in September 2012. He signed two memoranda of understanding with

[8] For more on Korea's Heavy Chemical Industrialization program, see Cumings (2005).
[9] Korea's shipbuilding industry regained its title from China as the world's largest in 2011, when it won 47.2 percent of all of the world's orders. China captured 29.2 percent of all orders. Japan's shipbuilding industry is the world's third largest (Want China Times, 2012).
[10] In 2012, Korea won 75 percent of the world's LNG carrier orders, 67 percent of drill ship orders, and 100 percent of all orders for floating production storage and offloading (FPSO) and LNG FPSO units (Park, 2013).

Norwegian Prime Minister Jens Stoltenberg on promoting the NSR and green shipbuilding.[11] The Korea Oceans Institute plans to invest $3.1 billion in the offshore and Arctic sectors by 2020 (Liang, 2012), revealing the country's economic stake in the growth of Arctic industries like LNG extraction and ice-class shipping. A diversified suite of northern industries is important, especially when certain sectors such as shipbuilding falter during economic recessions as happened in 2008. Shipbuilding is a major engine for national economic growth, constituting 10 percent of the economy (Park, 2012). With Korea expected to lose market share in low value-added ships like bulk carriers, the country needs to exploit new market demand in high value-added shipbuilding sectors (Won, 2010) in places like the Arctic. By contrast, China's shipbuilding industry of China can continue to grow in the lower-value sector of container ships and thus may not need to rely on the Arctic as much for future growth.

In a visible demonstration of its ice-capable technologies, Korea built its own icebreaker, *Araon,* in 2009. Unlike Japan's *Shirase,* which the military operates, the Korea Institute of Ocean Science and Technology runs the *Araon*. The vessel has participated in three scientific expeditions and will assist in search and rescue exercises in summer 2013 (Yonhap, 2012), illustrating the expansion of Korea's involvement in the Arctic. Whereas the excursion of China's *Xue Long* icebreaker in the summer of 2012 generated many headlines, Korea's icebreaker expedition attracted little such notice. Perhaps this signals that the Western media – and the Arctic states – view Korea as more of a friend in the Arctic than as a possible competitor or threat.

Like the other Northeast Asian states, Korea has cultivated its image as a cooperative actor in Arctic affairs by emphasizing its interest in climate change research and indigenous livelihoods. Moreover, in 2008 under President Lee Myung-bak, Seoul adopted a strategy of "Global Korea"[12] that reorients the focus of its foreign policy strategy away from the Korean Peninsula and towards the rest of the world. That same year, it applied for Arctic Council permanent observer status and launched a program of "Low Carbon, Green Growth." President Lee called green growth "a future strategy that will enable a Miracle on the Korean

[11] For a detailed analysis of the memoranda of understanding between Korea and Norway, see Bennett (2012).
[12] *The National Security Strategy of the Republic of Korea* (2009) further elucidates the details of "Global Korea." Although a new president, Park Geun-hye, has taken office since the strategy's release, new presidents usually continue the successful policies of the previous administration, albeit under a different name (Snyder, 2012).

Peninsula to succeed the Miracle on the Han River"[13] (Korea, 2011, p. 3). With sustainable development one of the Arctic Council's stated goals (Arctic Council, 1996), Korea has found a way to make its economic interests dovetail with the organization's environmental interests. Indeed, KOPRI's website states that in 2013, the institute "moved into the knowledge based economy R&D" (KOPRI, 2013), clearly unifying polar scientific and economic aims.

2. 4 Tying Together Northeast Asian Interests

Although none of the Asian states publicly voiced support for each other's bids for Arctic Council observer status, some experts have expressed that Asian cooperation in the Arctic could be a possibility. Seon-hee Eom, a researcher at the Korea Maritime Institute, suggested in an article that "cooperation with China and Japan may be considered in discussing the exploitation of Arctic fishing grounds" (2011, p. 46). Chinese officials have also mentioned that the Arctic could serve as a vehicle for East Asian cooperation. Following the transit of two German cargo ships from South Korea to the Netherlands via the NSR in 2009, Chen Xulong of the China Institute of International Studies remarked that not only is Arctic shipping important to developing China's northeast region and coastal areas: in addition, "it is of importance to East Asian cooperation as well" (Hong, 2012). Yet not much has materialized. So far, there appear to be separate but overlapping Chinese, Japanese, and Korean activities in the Arctic rather than cooperative Northeast Asian involvement. Japan and Korea are also more closely allied across the Pacific to the United States, its military ally, than China. It is possible that Korea and Japan do not want to be dragged down by their neighbor, seen as suspect because of its "perceived belligerence in its own claimed maritime areas and because of the widely held misperception that it claims some portion of the Arctic Ocean" (Manicom & Lackenbauer, 2013, p. 1)

[13] "Miracle on the Han River" is the name often given to the economic growth and modernization created by export-led industrialization between 1961 and 1996, which democratization also accompanied. For more on the "Miracle," see S. Lee and Yoo (1987).

Chapter 3

The Economic Space of the Asian-Arctic Region

3. 1 A Brief History of Arctic Integration with Global Markets

At various times in history, peoples from far-flung parts of the planet have traipsed northward, integrating the Arctic into their own economic systems. Although Frankel (1986) argues that the Arctic has historically proven to be an obstacle to northern shipping, there has actually been a wealth of economic activity, much of it based on the sea, for centuries. From the fifteenth through twentieth centuries, Europe was home to some of the world's most powerful seafaring states, making the North Atlantic the most commonly used entry point into the Arctic by peoples such as Basque, Dutch, and English whalers during the seventeenth century. Remnants of an old fishing station in Quebec stationed by Basque and Inuit peoples from 1680-1730 signify cross-cultural collaboration (Smithsonian Arctic Studies Center, 2013). Like the Sakhalin-II platform illustrated in the introduction, this fishing station exemplifies a "nodal" formation, a "manifestation of propinquity and multiple spatial connectivity" (Amin, 2004, p. 43). Europeans even made it to the high Arctic, with the Basque, English, and Dutch pursuing whales around Svalbard. None of these sixteenth- and seventeenth-century actors came from what are today considered Arctic states. This speaks to Arctic's fluid and continually changing political geography. The construction of the Arctic region is an ongoing process, and in this context, Northeast Asian interest should not be unexpected.

While mercantilism once drew countries to the Arctic in search of wealth to fill their national treasures, commodities cycles are now driving a significant amount of economic activity in the Arctic. When the price of oil is high, as it was in the 1980s and as it has been since the turn of the twenty-first century, multinational corporations pursue exploration in the Arctic. Discourses of sovereignty emphasized by countries like Canada and Russia overshadow the longstanding importance of foreign investment and involvement in the commodity-rich Arctic, even though Canada has long played host to foreign investors in one form or another such as the Hudson's Bay Company – an early day multinational corporation

–in the eighteenth and nineteenth centuries.[14] In 1973, Canada's Trudeau government introduced the Investment Canada Act, which attempted to make sure that any foreign investment into the country would be beneficial (Wahn, 1973). As countries like Korea research constructing an LNG terminal in the Northwest Territories, "beneficial" could possibly have different interpretations for indigenous people, government officials, and the vast majority of Canadians, who do not live in the Arctic.

3.2 The Asian-Arctic Region as a Process

To consider the production of an Asian-Arctic region, it is helpful to think of a region as a dialectical process. A region conditions society, while society enables a region (Gilbert, 1988). Regions are not static, unchanging entities: Pred (1986) argues that they are constantly "becoming." Yet a better word to describe the Asian-Arctic region is not so much "becoming," which tends to obscure the importance of agency, as "being produced." Different actors are producing different conceptions of what the Arctic region entails and what Asian interests mean for the Arctic. Adopting a historical perspective is important when analyzing a region as a process because it reveals how regions rise and decay over time; regions in fact depend on both place and period (Taylor, 1991). Taylor pinpoints 1991, the close of the Cold War, as the end of the region of Atlantic Europe. Similarly, we could mark 1987, when Soviet Premier Mikhail Gorbachev made his Murmansk Speech, as the starting point of the circumpolar Arctic.[15] 2013, the year in which the Arctic Council admitted Asian observers, could be the start of a more networked, globalized Arctic region. Given this contextual perspective, regional geography is more than just a way of understanding the world. It is actually an "instrument for action" (Gilbert, 1988, p. 222) that, in the Arctic, both conditions and is enabled by national governments and circumpolar indigenous organizations, local residents and multinational corporations, and scientists and TV producers, to name a few.

Northeast Asian policymakers' rhetorical justifications of Asian involvement in the Arctic demonstrate how economic interests are translating into strategies and investments in regional identities. Massey (1991) argues that communities do not need to be in the same place to exist, so it is possible that, for instance, the creation of the Asia Pacific Economic Cooperation organization, which stretches from Indonesia to Chile, could eventually spark

[14] On the Hudson's Bay Company, see MacKay (1970).
[15] For more on the Murmansk Speech, see Scrivener (1989) and Åtland (2008).

the emergence of an actual Asian-Pacific community in which people share an identity. China, Japan, and Korea are each attempting to engineer a national identity in the Arctic partly based on national endeavors, but also by calling upon a "global polar culture," as I will highlight in chapter four. Yet it is debatable whether the Arctic Council has even succeeded in producing a polar identity amongst its member states. Uneven development, for one, could preclude the creation of an imagined community or shared identity in the Arctic. Residents in cities like Tromsø can purchase a banana from Peru or hop on a plane to London, allowing them far different lifestyles than the residents of remote communities in Nunavut, whose nearest neighbors might be iron ore mines. Both groups of people are connected to global flows of trade and investment, but in vastly different ways. Thus, there is not one ideal way to define the Arctic. Instead, it is more helpful to view it through a prism of multiple regional structures and identities, with some parts of the Arctic more integrated and tightly knit than others whether by proximity, transportation connections, or ease of economic exchange.

3.3 Arctic Exports to Northeast Asia

Studying the export strengths of the Arctic countries to China, Japan, and Korea reveals the contours of the Arctic as a resource periphery to Northeast Asia. Research into an Asian-Arctic region builds on the work of sociologists like Wallerstein (1979) on core-periphery relations and geographers like O'Loughlin and Van der Wusten, who questioned the existence of a "Eurafrica" panregion (1990). Key thinkers in late nineteenth and early twentieth-century German *Geopolitik* such as Friedrich Ratzel and Karl Haushofer initially proposed the idea of panregions, which connected core areas to peripheral places that supplied resources (O'Loughlin & van der Wusten, 1990). The U.S. National Intelligence Council (Fingar, 2008, p. iv) predicts that by 2025, "a global multipolar system is emerging with the rise of China, India, and others." The Arctic constitutes a periphery from which resources are extracted to fuel growth in the developed core, of which China, Japan, and Korea are members. Generally speaking, Asian economic interest in the circumpolar north is best characterized by pinpointing two maritime zones of activity where Arctic products complement current Asian demands: the North Pacific and the larger North Atlantic region, stretching from Murmansk to Iceland and Greenland. Most helpful would be to investigate trade at a sub-national level, although this is difficult due to the lack of reliable data from countries like China and Russia. A full suite of data could help show where incorporation of

Arctic resources into local economies in Northeast Asia has proceeded the furthest. In broad terms, the Arctic's vast forests, bountiful fisheries, and plentiful sources of oil and gas attract resource-poor Japan and Korea, especially given those countries' energy-hungry manufacturing sectors. Asian consumers also want Norwegian salmon and even Swedish-designed Ikea furniture.[16] Commodity cycles have made once expensive, remote-seeming Arctic resources like oil, gas, and minerals affordable to develop. The LNG market is regional rather than global, and it is at its most expensive in East Asia.[17] Rather than increasing accessibility due to climate change, the price of commodities and worries over securing energy resources is actually leading this round of Arctic oil and gas exploration (Ebinger & Zambetakis, 2009). Furthermore, for Japan, the Fukushima nuclear disaster has led the country to dramatically increase its purchases of oil and gas – an unexpected event that is reshaping regional connections.

In the North Pacific, Alaska, Canada, and the Russian Far East all have close ties to Asia. In 2009, over 50 percent ($733 million) of Alaska's international exports went to China, Japan, and Korea (Campbell, 2010), a significant increase from a decade ago. Alaska's main export to Asia is seafood, while timber is also important.[18] Thus, as Asia's economies grow, so could Alaska's. Moreover, connections from Russia's Far East and British Columbia are often stronger with Northeast Asia than western Russia or eastern Canada, respectively. British Columbia has strong economic and cultural ties with Asia, perhaps speaking to the eventual development of new regional identities; already in Vancouver, nearly 28 percent of residents have East and Southeast Asia origins (Statistics Canada, 2012). In 2012, exports to Japan, China, and Korea totaled over CAN $12 billion, more than for any one province except Alberta and Ontario (BCStats, 2013). BCStats also lists the "Pacific Rim" as an export area rather than the usual "East Asia," exposing how the concept of a Pacific region has even spread into Canada's record books, which are probably not intended to market exciting trade opportunities. More publicly, in 2007, Canada launched the Asia-Pacific Initiative, which loftily describes that in the twenty-first century, "as in the Renaissance when Venice facilitated the meeting of the West and the Orient, this Asia Pacific Initiative envisions British Columbia – Canada's Pacific Gateway – as the Venice of the Pacific Century and the crossroads between Asia and North America" (Ministry of Economic

[16] China is Ikea's second-biggest market (Bloomberg, 2013).
[17] The price of LNG is $14.50 per mBTU in East Asia as opposed to only $4.10 in the U.S. (Wright, 2013).
[18] Asian countries value the strong, vertical-grain wood that the state produces (Roos, Brackley, & Sasatani, 2011).

Development, 2007, p. 10). The government of British Columbia also calls the province "Canada's Pacific Gateway," a case of economic interdependency translating into identity and action. Thus, any reluctance from Canada to approve the Asian applications for Arctic Council observer likely would have stemmed from Prime Minister Stephen Harper's sovereignty-focused political agenda rather than British Columbia, so closely tied as its economic interests are to Asia.

3.4 Maritime Connections

More than simply serving as a destination for resource extraction, the Arctic has also acted as a throughway to markets that may seem almost improbable today. During the sixteenth century, Arctic Russia served as a midway point between England and the Caucuses en route to the riches of Persia and the Arab world (Curtin, 1984). In 1555, the London-based English Muscovy Company established maritime trade with Archangelsk in pursuit of forest products (Etkind, 2011). English merchants rounded the North Cape, sailed through the Barents Sea, and then continued south through the rivers of northern Russia to Moscow, ultimately to the Caspian Sea.. Today, the NSR is the Arctic route most often billed as a type of shortcut, in this instance between Europe and Asia.

Following in their centuries-old history as maritime nations (and recent history as countries with sizeable LNG carrier fleets), Japan and Korea have built economic ties with coastal destinations in the Arctic along the NSR and Pacific Rim. The Great North Circle Route connects Shanghai, Yokohama, Dutch Harbor, Vancouver, and Seattle, while a short detour also incorporates Vladivostok. Approximately 3,100 ships sail in each direction along the route annually (Economist, 2007). As cities and ports along China's coastline grow wealthier and as Beijing constructs LNG terminals on the country's coast, China can be expected to continue its maritime thrust. The Northeast Asian countries are actively attempting to facilitate northern shipping by signing memoranda of understanding with Arctic countries, advancing their shipbuilding industries, and vocalizing their interests in helping to develop the Polar Code. The Northeast Asian countries stand to benefit from improved shipping infrastructure, as better infrastructure can redistribute trade flows and generate larger volumes of trade (Rietveld & Nijkamp, 1992, p. 17). A well-developed NSR could increase growth at both ends and all along the route (although the possibility for uneven development also exists). If the sea ice melts enough and sufficient infrastructure is created, there could one day even be a Trans-Arctic shipping route linking the cornfields of the

Canadian prairie provinces and American Midwest through Churchill, Canada to markets in Asia. The environmental consequences of such a sea change would be drastic and could dramatically restructure global commodity chains. Yet even trans-Arctic shipping has a precedent. During the 1960s, the USSR imported wheat from Canada through the Port of Churchill via the so-called Arctic Bridge shipping route ("Three," 1966), illustrating once again that climate is not the only determinant of trade relationships in the Arctic.

Though often trumpeted in the media as the next big shipping route, the NSR, let alone the Arctic Bridge, can hardly compete with the Straits of Malacca and the Suez Canal at present. One of the challenges with turning the NSR into a competitive route is the lack of significant economic activity and ports along the route itself. This is problematic in an age of pendulum shipping, when ships generally make multiple ports of call during one voyage (Rodrigue & Browne, 2002, p. 175). Singaporean shipping companies have no plans to expand into the north (Lasserre & Pelletier, 2011), while Japanese business also does not yet perceive the NSR to be competitive. Yet a sizeable amount of maritime activity already exists at both ends of the NSR in the North Pacific along the Great North Circle Route and in the North Atlantic, where the Vikings' voyages took the seafaring people from Scandinavia to the shores of Newfoundland and Maine. Eimskip, an Icelandic shipping company, recently moved its U.S. port of call from Norfolk, Virginia to Portland, Maine to reduce shipping times to Europe (Eimskip, 2013). In turn, it has connected New England timber and seafood producers with consumers in Iceland, Norway, and even Russia, pointing to a revival of the North Atlantic region that Taylor (1991) claims ended in 1989. Olafur Hand, Eimskip's marketing director and an Icelander, asserted, "We found this place one thousand years ago. And now we're back" (Bell, 2013).

In the North Pacific, the historical nature and depth of commercial activity illuminate the economic region's shape. All of the countries surrounding the North Pacific engage in industrial-scale fishing in the Sea of Okhotsk, Sea of Japan, and Bering Sea. Shipping, too, has long been important. In 1968, Japan and the USSR started a joint cargo liner service to Canada (Fairhall, 1971, p. 58). Today, LNG shipment epitomizes the geographic reach of the region's capital flows. The first LNG carrier to transit the NSR sailed from Hammerfest, Norway to Tobata, Japan in December 2012. The Russian state-owned company, Gazprom, chartered the Greek-owned, Marshall Islands-flagged *Ob River*, a carrier that Korean company Hyundai Heavy Industries built in 2007. Previously, *Ob River* had exported LNG from Sakhalin-II to Japan. On its voyage through the icy NSR, three Russian icebreakers

guided the carrier. Researchers from Krylov State Research Center and Sovcomflot were onboard studying ice navigation, showing the interdependencies of science and commerce in the Arctic. Commercial activity provides a means for underfunded scientists to access the Arctic, while they in turn produce the expertise companies need to operate in the region. In sum, *Ob River's* transit reveals the interconnections between extractive industries in Norway, transportation and science in Russia, heavy industry in Korea, and economic demand in Japan.

3.5 Northern Gateways, Windows, and Pivots to Asia

Trade also creates diffuse networks in the Arctic and sub-Arctic, which are home to many geo-economic "gateways," "windows," and "pivots" to Asia. This is not surprising for an area with extensive coastlines and present and future seaports. Most ports pursue a marketing strategy of "establishing privileged positions to access hinterlands" (Rodrigue & Browne, 2002, p. 169), revealing how territory is portrayed as physically networked to a wider world of flows rather than being fixed, unmoving spots on a map. In the Arctic, cities and ports are almost always gateways from the north to other parts of the world; only Tromsø markets itself as the "Gateway to the Arctic" – and rather successfully at that, having won the right to host the Arctic Council Permanent Secretariat. These gateways bear a similarity to the wormholes that Sheppard (2002) uses to describe rapid connections between geographically distant parts of the globe. For instance, the Port of Churchill's website bills itself as "Canada's only Arctic seaport,"[20] which "brings the world of ocean trade to the doorstep of Western Canada" (Port of Churchill, 2013). It is possible that Asian interest in the Arctic could eventually expand to this remote location, but in the meantime, more places in the Arctic are positioning themselves as gateways to the markets of Asia, whether by virtue of proximity or rapid connections. The many gateways located in the North Pacific illustrate the region's growing economic interconnections and the way in which territory and location are represented relationally. Cities and regions do not adhere to "territorial integrity" (Macleod & Jones, 2007, p. 1183), as Amin (2004, p. 34) argues that "they are made through the spatiality of flow, juxtaposition, porosity, and relational connectivity" (in Macleod & Jones, 2007, p. 1183).

[20] Canadian Geographic's website (2011) states, "Although technically, the Hudson Bay watershed is part of the Arctic Ocean watershed, it is often studied as its own system" (2011). Yet it is debatable whether the Hudson Bay is actually part of the Arctic Ocean's watershed, even though the body of water, like the Sea of Okhotsk, is an important part of the "high latitude cryosphere and climate system." (Lewis & Jones, 2000, p. 101).

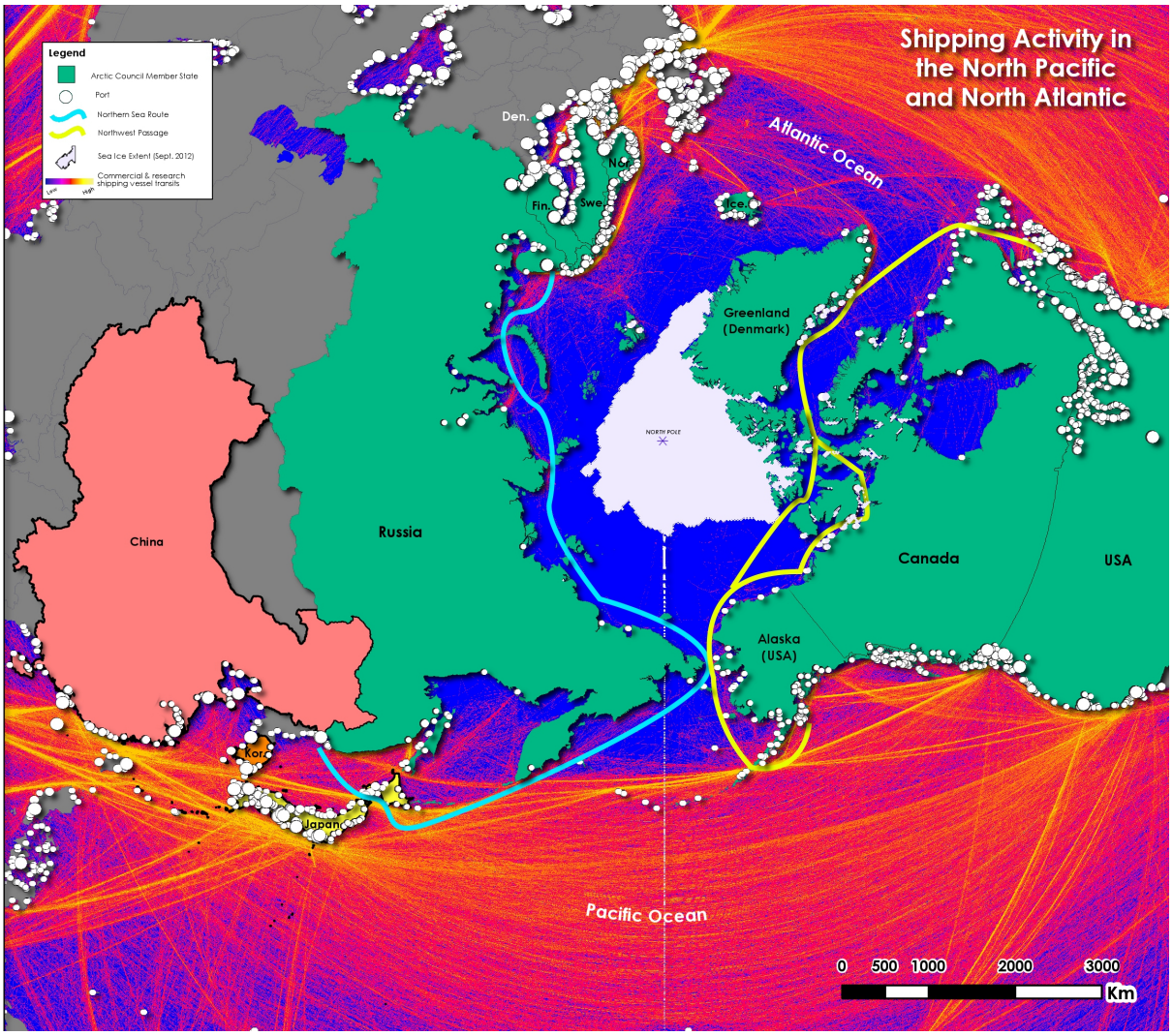

Figure 3.1 *Shipping Activity in the North Pacific and North Atlantic.*

One of the most important hubs of Asian-Russian trade is the so-called "gateway" port city of Vladivostok, the terminus of the Trans-Siberian Railway. In the 1990s, Japan, Korea, China, Finland, and Italy negotiated agreements with the governor of Primorsky Krai for participation in a Greater Vladivostok Free Economic Zone, though it did not come to fruition (Christoffersen, 1994). Ferries sail to Japan and Korea, flights connect to both Alaska and Northeast Asia, and one of the city's main industries is repairing and reselling old Japanese cars. Vladivostok is located in Primorsky Krai (the "Maritime Province"), which is supposed to be Russia's "window on the Asia-Pacific" (Christoffersen, 1994, p. 517). In 2009, Putin announced, "We can position Vladivostok as Russia's 'gateway to the Pacific'" (Putin, 2009). The distinction between window and gateway is an important one, as the latter implies a sense of control with the city acting as a "gatekeeper for Russia's regional relations" (Christoffersen, 1994, p. 525). Rozman (2008, p. 37) attests that Vladivostok, "the

maritime gateway to the Korean peninsula, Japan, and coastal China, becomes the pivot in a triangle reaching to Khabarovsk and Iuzhno-Sakhalinsk and beyond to Russia's vast northeastern expanses." Although Vladivostok is located far from the Arctic Circle, it sits at the eastern end of the NSR, meaning that it could be an important transshipment hub for Arctic resources to reach their ultimate destinations whether across the Pacific or south through the Sea of Japan. The strategic meaning of Rozman's "pivot" is thus more economic than political. Vladivostok is more akin to a trade hub than a point on the map considered crucial to possess for global domination. Moscow also notably designed to designate Vladivostok as the host city for the 2012 APEC Summit rather than the decidedly more European locales of Moscow or St. Petersburg. The Kremlin's overall strategy in Vladivostok, a city it sees as a crossroads of economic exchange, exemplifies what Deleuze (1994, p. 385) identifies as the State pursuing "a process of capture of flows of all kinds, populations, commodities or commerce, money or capital, etc." Yet the port city could lose its prime position as a pivot in Northeast Asia without adequate investment from Moscow or the continued support from the Kremlin for globalization, running the risk of turning into an "outpost" rather than a "gateway" (Rozman, 2008, p. 47), or even a mere passive window onto the North Pacific.

At the western end of the NSR lies the North Atlantic region, another zone of Asian interest that partly hinges on Iceland. The North Atlantic island nation has leveraged its geographic location to position itself as a potential transshipment hub – another sort of gateway to multiple destinations. Previously, it served as a mandatory refueling stop for flights between North America and Europe. Iceland is now once again trying to reposition itself as a sort of North Atlantic pivot, particularly since the departure of the U.S. Air Force from its base in Keflavik in 2006.[22] China has taken a particular interest in this tiny North Atlantic island, with which it signed a free trade agreement (FTA) in 2013 – the first between a European country and China (Ministry for Foreign Affairs, 2013). The joint statement issued by the two countries upon the announcement of the FTA called for heightened political dialogue on issues such as "human rights, gender equality, labor issues, Arctic affairs, as well as cooperation on geothermal development, culture, education and tourism" (Ministry for Foreign Affairs, 2013). The FTA is therefore more than an economic agreement: it is also an attempt to bring two disparate countries closer together on a host of political and environmental issues, even in areas where Iceland, which has had a lesbian

[22] For more on Iceland's geopolitical positioning, see Dodds and Ingimundarson (2012).

prime minister, and China, infamous for its human rights abuses, are arguably miles apart. Furthermore, the FTA conveys that Iceland is possibly reorienting itself away from the EU and more towards Asia. Although Reykjavik is thousands of miles away from Northeast Asia, flows of capital and goods could bring Asian vessels to the Icelandic capital in the near future.

3.6 Economic Cooperation between Northeast Asia and the Arctic

As the China-Iceland FTA demonstrates, the Arctic countries, particularly the Nordic countries and Russia, have reciprocated Northeast Asian interest in building economic ties. Norway's Minister of Trade and Industry, Trond Giske, expressed at the World Expo Day in Korea in 2012, "Korea is a very important market for Norwegian industry and the seminar held here in Yeosu today shows that there is a lot of commitment to and interest in further developing this collaboration on both the Korean and Norwegian sides" (DNV, 2012). He highlighted green shipping, maritime offshore and oil and gas sectors as "common interests in exciting areas" (DNV, 2012). Indeed, trade between Norway and Korea is growing rapidly, increasing 70 percent in 2011 (Norsk Industri, 2012). The high-tech industries of Korea and Japan, which are more developed than China, complement the Arctic's primary sectors, particularly offshore oil and gas. Demonstrating the advances in bilateral cooperation, Japanese Prime Minister Shinzo Abe visited Moscow in April 2013, the first such visit by someone in his position since 2003. With Japan's growing need for LNG imports and the growth of LNG development in Russia, there is a natural fit between the two economies. Ratti and Reichmann (1993) argue that border regions have moved from being "front lines" of sovereign states to socio- economic "contact zones," (in Blatter, 2004, p. 532) yet I argue that the hard and fast divisions wrought by the Cold War were actually an aberration in a longer history of encounters and contacts between diverse peoples in places like Northeast Asia and Alaska.

China and Japan differ in their pursuit of international cooperation. In Northeast Asia, China favors cooperation led by central governments and economic development that includes investment, official development assistance, and loans. By contrast, Japan prefers regional participation centered on the Sea of Japan, "with local governments making decisions, through the private sector, primarily with trade, letting economic cooperation emerge naturally" (Christoffersen, 1994, p. 517). This difference in strategy manifests itself

in the larger way in which China and Japan pursue investment in the Arctic, and as I will explain in the next chapter, science. With the government largely responsible for funding research and development in China, science often takes the form of big, publicly visible efforts like icebreaker expeditions or moon landing programs, whereas Japanese and Korean research and development is often done on a smaller scale by private companies. Thus whereas the Arctic states sometimes perceive China, with its centralized government, as having a unified strategy in the Arctic both politically and economically, they do not see Japan as such a monolithic, determined actor.[23] It is likely that China, rather than Japan, will sooner deliberately match economic and political strategy in the Arctic, just as the China-Iceland FTA has shown.

3.7 An Asian Turn in the Arctic's Economic Integration

Asian interest in the Arctic is the newest iteration of centuries-long foreign interest in the circumpolar north. Trade connections and transportation linkages are increasing in the North Pacific, an area that constitutes Northeast Asia's Arctic near abroad with Russia serving as an important crossroads between Asia and North America. The NSR could eventually bridge the two zones of maritime activity in the North Atlantic and the North Pacific. Despite the growth in the economic region of the North Pacific, political region-building efforts lag farther behind. However, there has already been small if significant movement towards establishing political ties to match the economic space, if only on a bilateral level, with the China-Iceland FTA the primary example. Yet no politicians have come forward speaking of an Arctic community that includes Northeast Asia in the same way as happened during the 1980s before the formation of the Asia-Pacific Economic Cooperation organization or equally during the 1990s before the establishment of the Arctic Council. Instead, Chinese, Japanese, and Korean diplomats, politician, and scientists reframe the Arctic as a global space for foreign investment and international scientific efforts, as I turn to in the next chapter.

[23] For instance, when Chinese businessman Huang Nubo attempted to purchase land in eastern Iceland equivalent to one percent of the country's territory to ostensibly develop a tourist resort, his plans came under fire and attracted international attention. Iceland's interior minister, Ogmundur Jonasson, rejected Huang's request for an exemption from a law that prohibits foreigners from owning land. "One has to look at this from a geopolitical perspective and ask about motivations," Jonasson admitted (Higgins, 2013). This type of statement did not surround interest by Korea's KOGAS in developing an LNG terminal in the Northwest Territories, even though the company is state-owned.

Chapter 4

Northeast Asian Productions of Circumpolarity

China, Japan and Korea's applications for observer status are the formalized outcomes of an extensive set of interests in the Arctic originating from both governmental and business sectors. To support their applications and legitimize their Arctic activities, the Asian states are trying to position themselves as near-Arctic states by constructing Arctic national identities and, in the process, redefining what the concept of "Arctic" encapsulates. At the same time, these countries are promoting a global polar culture to justify their involvement in the circumpolar north. Altogether, lacking territory north of the Arctic Circle, China, Japan, and Korea have instead been trying to establish their regional legitimacy through actions that ultimately abide by the rules of engagement. I identify three key means by which the Asian states construct their Arctic identities to legitimize their participation in the region: taking advantage of the Arctic's maritime materiality and circumpolar position, rhetorically framing the Arctic as a global space, and performing internationally collaborative scientific research.

4.1 Whose Circumpolarity?

While certain Arctic countries may view Asian interest in the region as surprising, viewed from Asia, it may appear to be a natural development. The circumpolar north connects Asia, North America, and Europe, continents normally perceived as disparate and distant from one another. This "circumpolarity" "peripheralizes all of the imperial centres of the northern hemisphere, presenting us with a wholly alien planetary vision" (Craciun, 2009, p. 104). Yet this alien planetary vision may only be foreign to Westerners, as conceptions of time and space are social constructs (Harvey, 1989), and maps are ideology (Connery, 1994, p. 31). Baudrillard (1981, p. 2) declares, "The territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory – the precession of simulacra – that engenders the territory." The polar azimuthal projection used in most maps of the Arctic and the United Nations logo has helped shape a vision of the Arctic as a region centred on the North Pole, but an actual intergovernmental organization: the Arctic Council. By contrast, the

Mercator projection draws more attention to the Arctic as a periphery of the Atlantic or Pacific Oceans.

In comparison, the Chinese perception of the seas is not as fragmented as its Western counterpart. In Chinese, the word for "sea" literally translates to "vast, expansive space" (Schottenhammer, 2012, p. 67). The sixteenth-century voyager Zheng He declared in a tablet that his voyages under the Ming Dynasty were successful in "unifying the seas and continents" (Duyvendak, 1938). The oceans have played an important role for Asia for thousands of years, and at least since 1000 BC in China (Schottenhammer, 2012). Like the Arctic Ocean today, China's surrounding seas were paths to both goods and knowledge.[24] Northeast Asia was connected to the Persian Gulf through the Indian Ocean – a geographic connection that may seem unusual to Westerners. Thus, viewed in a longer historical context, the Northeast Asian retreat from the world's oceans starting in the eighteenth century is an anomaly. By exploring the Arctic for shipping potential, science, and fishing, the Asian states are picking up where their forebears left off several centuries ago. Indeed, the Chinese government has promoted Zheng He's voyages as a symbol of the country's long history of peaceful expansion.[25]

The Asian states are building polar identities by capitalizing on their maritime heritage and the watery spaces of the Arctic. Steinberg (2001, p. 31) argues that modern capitalist territorial construction perceives the ocean as a secondary, extra-state space "beyond the essential state-territories in which 'society' occurs." Yet the theme of China's recent celebration of the United Nations World Oceans Day was "building maritime power," and one of the day's goals was to "enhance people's awareness of the ocean" (National Oceanic 2013). Maritime power is seen as necessary to develop a "marine ecological civilization" (海洋生态文明建设) (National Oceanic, 2013), demonstrating a view of civilization that straddles both land and sea as opposed to more diametric Western conceptions. Thus, the Central Arctic Ocean actually plays a primary role in the (arguably capitalist) Northeast Asian states' Arctic identities because it is the only place in the high latitudes that they can freely access via the seas, aside from their research stations in Svalbard. In Western popular culture, the ocean is viewed equally as both a space of flows to cross in search of new investments and a home to past heroics (Steinberg, 1999) – a

[24] The sea route from Japan to China served as a route for scholars seeking Buddhist knowledge on mainland Asia (Schottenhammer, 2012, p. 73).
[25] At an Association of Southeast Asian Nations (ASEAN) meeting, Chinese state councilor Dai Binguo stated that Zheng He's "treasure fleet" brought "porcelain, silk and tea rather than bloodshed, plundering or colonialism" (Murphy, 2010).

perception that appears to persist in Chinese, Japanese, and Korean cultures, too, given those countries' activities in the Arctic. Korean fishermen, for instance, are seeking out Arctic fishing grounds to combat financial woes in existing depleted fisheries and to meet high domestic demand for northern species like Pacific cod and Alaskan pollock (Eom, 2011, p. 2). Yet those economic needs sit astride a national self-perception of possessing the capability to sail across the world's oceans, with the *Araon* (Korean for "All-Ocean") icebreaker leading the way in the Arctic.

The Northeast Asian countries' perceptions of the status of the Central Arctic Ocean contrast with their views towards the seas bordering East Asia. In the East China Sea, China and Japan dispute ownership of the Senkaku/Diaoyu Islands, and in the Sea of Japan, Japan and Korea tussle over the Dokdo Islands. By contrast, none of the Asian states have any claim to territory in the Arctic Ocean. It serves as an arena for China, Japan and Korea to compete with each other in a manner that does not risk military conflict as much as other geographic regions where land is contested. Japan's Mitsubishi, Korea's Korea Gas Corporation (KOGAS), and China's PetroChina each have a 20 percent stake in an LNG plant under development in Kitimat, British Columbia (PetroChina, 2012), illustrating the ability of the Asian countries' companies to work together in the energy sector when the resource in question is not on disputed home turf.

Partly because they have no territorial claims to the Arctic, Asian government officials speak of a "polar culture" that belongs to the globe rather than to any particular country or ethnic group. Although this envisioning superficially parallels Craciun's call for a planetary and decolonial circumpolarity (2009), the argument could be made that although the Asian countries may not be treating the Arctic as a literal colony, they are in fact treating it as a resource periphery. To justify their extractive efforts, Asian politicians, subconsciously or not, draw on similar visions as eighteenth-century European imperialists. British, French, and German explorers portrayed the landscapes in the parts of the world subject to their colonial and exploratory enterprises as "uninhabited, unpossessed, unhistoricized, unoccupied even by the travelers themselves" (Pratt, 2003, p. 51). African peoples, for instance, were described as without lifeways and culture (Pratt, 2003, p. 53). In a similar manner, Huigen Yang, Chinese Polar Research Institute Director, closed his speech at the 2012 IPY conference in Montreal by saying that with the continued development of multipolar linkages, "a more creative and harmonious polar culture will be cultivated for a sustainable

planet."[26] Such a suggested polar culture overlooks the existing circumpolar or, at the very least, transnational cultures that exist amongst some of the Arctic's indigenous peoples. Yang's discourse does not aim to strengthen and expand existing indigenous polar cultures so much as replace them with a globalized and essentially rootless, deterritorialized one. At the 2013 Arctic Frontiers conference in Tromsø, Korean Ambassador Lee to Norway expressed, "Korea will do its due part by joining forces so that the Arctic Frontiers will open a new horizon for all the peoples of the world." In line with the country's projection of itself as a concerned global citizen, he continued, "Changes in the Arctic gravely worry us Koreans as global citizens, since we care deeply for the future of our earth and for our next generation" (Lee, 2013). Allott (1992), in his discussion of the international law of the sea, suggests that we consider "our" as a participatory rather than possessive pronoun. Only some countries, notably the Arctic and Asian ones, are actually participating in the Arctic, while residents of, say, the sixteen landlocked African countries largely do not. Consequently, it is important to note the identity and motivations of the actor(s) behind the production of any vision that uses the word "our" as a global referent.

The idea of creating a polar culture for the benefit of all mankind rarely emanates from the Arctic states, which advocate regional stewardship, even if it is founded on international laws like the United Nations Law of the Sea (UNCLOS). Many of the Arctic states do not view the Arctic as the common heritage of mankind, perhaps in part because today's commodities prices have made the seabed more valuable than it ever was. The Arctic states increasingly are incorporating their Arctic regions into their identities, with Canada and Norway emphasizing their respective polar heritages, for instance. They do not want the Arctic to be seen as a *terra nullius* onto which a global polar culture could be projected. As an example, when the Norwegian government's 2011 white paper, *The High North: Visions and Strategies* mentions the word "global," it is in the context of climate change having global ramifications. The word is not used to imply the creation of a global polar culture in which all of mankind would benefit from the Arctic's development. Likewise, Canada's agenda during its 2013-2014 chairmanship highlights a more parochial view of the region (Foreign Affairs and International Trade Canada, 2013).

[26] Also notable is the use of the word "harmonious," a popular term in Chinese domestic and foreign policy initiatives. The use of the word "harmonious" helps illustrate the peaceful nature of China's "going-out" strategy. For a discussion of the importance of the "harmonious" concept in Chinese policymaking circles, see Zheng and Tok (2007).

It is possible that the Arctic Ocean could be defined as an enclosed or semi-enclosed sea, at which point it would be the responsibility of the surrounding states to coordinate regional management under Article 122 of UNCLOS. Down the line, international networks of scientists in the Arctic could rub up against stricter boundaries at sea. The Arctic states are attempting to stake out "rational" borders based on scientific data showing the extent of their continental shelves. Should, say, Canadian and Russian claims to their extended continental shelves end up extending as far as desired, they could possibly erect barriers to other countries doing scientific research in their waters. Article 56 of UNCLOS mandates that in the exclusive economic zone, coastal states have jurisdiction over marine scientific research. That means that in the future, coastal states could block scientific research expeditions by countries like China and South Korea. Their icebreakers would still have the right of innocent passage, but not necessarily the right of scientific research. Fishing could also be restricted, since Article 56 allows coastal states sovereign rights (but not sovereignty) over the seabed and the resources in the waters above. Without the ability to perform science or fish in the Arctic Ocean, the Asian states would lose a large part of their projected polar identities.

4.2 Discursively Framing the Arctic

The project of building Arctic identities involves overlapping frameworks of regional identities in which China, Japan and Korea project themselves north and south with the aim of turning rhetoric into political reality. Their extensions northward form a part of each country's broader strategy of participation in the multilateral community. China, for instance, positions itself as a near-Arctic state at the same time as it builds ties with Central Asian states and Russia through the Shanghai Co-operation Organization. In Africa, where China is sometimes called the "dragon in the bush" (Large, 2007), the country invokes its two-thousand year old historical ties with Africa as a basis for its continued involvement in the continent (Alden & Alves, 2008). Beijing is not recalling historical involvement for purely "crude economic instrumentality" but rather to "reconcile China's self-imposed identity as a developing country with its emergence as a global power" and demonstrate that it will not harm the interests of other, poorer countries (Alden & Alves, 2008, p. 1). The invocation of historic ties parallels government officials' recollection of Zheng He's voyages as friendly and peaceful. China also employs a discourse of "solidarity" emphasizing that like African countries, it, too, is developing. Yet in the Arctic, the Northeast Asian states, as part of their

attempt to rework the Arctic into a global and deterritorialized space, do not claim solidarity so much as subtly delegitimize any claim the Arctic countries or peoples have to a heightened risk to climate change. In a 2009 speech in Stockholm called "My Homeland is Melting," Mary Simon, president of Inuit Tapiriit Kanatami (ITK), stated:

> "I am not portraying Inuit as simple 'victims' of climate change. Our people have occupied the Arctic for thousands of years. We are on the front lines of climate change and this presents us with both unique and exceptional challenges." (ITK, 2009).

"Homeland," "front lines," and "exceptional" are all words that situate residents of the north as uniquely affected by climate change. By contrast, Chinese, Japanese, and Korean officials claim that the Arctic states are not exceptional at all. In his 2013 Arctic Frontiers speech, Korean Ambassador Lee proclaimed, "Climate change is being felt in every corner of the world. Korea is no exception. In fact, Koreans feel the impact of climate change acutely" (Lee, 2013).

Despite their lack of territory in the Arctic and attempts to put a global veneer onto the Arctic, Asian policymakers also tenuously claim presence and proximity to foster Arctic identity building. These discursive practices highlight the continuing importance of territory in determining legitimacy in and belonging to a region. In the Arctic, none of the Asian states can claim historical presence dating more than fifty-odd years, but this amount is often cited at the beginning of government officials' speeches as if to legitimize their continued involvement. Perhaps showing that Beijing ultimately does not believe that the country belongs to the Arctic region, Hu Zhengyue, Chinese Assistant Minister of Foreign Affairs, remarked in a speech in Svalbard, "While the Arctic is mainly a regional issue, climate change and international shipping also make it an inter-regional issue" (in Hong, 2012, p. 54). Yet still, trying to play up their geographic proximity to the north, Chinese representatives have called their country a "near-Arctic state" in speeches,[28] using a term made popular by Soviet Premier Mikhail Gorbachev.[29] In his 1987 Murmansk Speech, he opined, "The potential of contemporary civilization could permit us to make the Arctic habitable for the benefit of the national economies and other human interests of the near-

[28] Chinese Ambassador to Norway Zhao Jun called China a "near-Arctic state" in his speech at the Arctic Frontiers conference in January 2013 (Zhao, 2013).
[29] China is not alone in using terminology such as "near-Arctic." In the UK, written evidence submitted to the Parliamentary Environmental Audit Committee called the country a "sub-Arctic nation" with political, economic, environmental, scientific, and popular interests in the Arctic (Dodds, 2012).

Arctic states, for Europe and the entire international community."[30] His willingness to let the Arctic benefit the "entire international community" is rarely heard from Arctic states today.

China's practice of claiming that it is a "near-Arctic state" parallels the European Union's (EU) efforts. The Chinese province of Heilongjiang is situated close to the 50th parallel, just like the EU member states of Estonia, Latvia, and Lithuania. The EU's Northern Dimension initiative has attempted to increase regional cooperation between the Baltic countries, Nordic countries, and Russia. The policy describes itself as covering "a broad geographic area, from the European Arctic and Sub-Arctic to the southern shores of the Baltic Sea, countries in the vicinity and from north-west Russia in the east, to Iceland and Greenland in the west," combining disparate parts of Europe in one fell swoop to produce a northern region. Powell (2011) suggests that the EU's Northern Dimension could eventually translate into Arctic strategies. Latvia is nearly as far from the Caspian Sea as the Arctic Ocean, yet the EU is not recontextualizing Riga's location to win a seat at discussions on Caspian Sea management. The actions of both China and the EU reveal how sub-Arctic territory is situated to be used as strategic footholds to the circumpolar north.

In the two-year lead-up to the decision on their countries' applications for Arctic Council observer status, Chinese, Japanese, and Korean government officials have promoted their countries' rule-abiding natures. Whereas in 2010, Rear Admiral Yin Zhuo of the Chinese People's Liberation Army declared, "The Arctic belongs to all the people around the world as no nation has sovereignty over it" (Kim & Blank, 2011, p. 309), military officials and politicians have since avoided making such statements. Since the 1990s, respect for the rule of law has experienced a revival both within countries and internationally (Carothers, 1998). The Asian countries promote the rule of law to ensure that they are respected members of the advanced world. China, Japan, and Korea are able to project power in the Arctic's maritime spaces and claim them as part of the global commons while simultaneously enhancing their identities as advanced and rule-abiding countries. During the meeting of Senior Arctic Officials in Stockholm in November 2012, Parliamentary Senior Vice-Minister for Foreign Affairs of Japan, Shuji Kira, expressed, "As a State who has always valued the 'rule of law,' let us reiterate our support to the view expressed in the Ilulissat Declaration that an extensive international legal framework, including the law of the sea, applies to the Arctic Ocean" (Kira, 2012). When sovereignty is such a hot-button topic for some Arctic states, it is

[30] This is a sentence Prime Minister Vladimir Putin, who once notoriously lamented that the "demise of the Soviet Union was the greatest geopolitical catastrophe of the century" ("Putin," 2005), probably would not utter today.

prudent for non-Arctic states to underscore their respect of the existing regimes in the region. Guo (2012), however, points out the irony of Arctic states making respect for the Arctic states' sovereignty a criteria for being an observer when they themselves still dispute territorial claims. Thus, the Asian countries are careful to act diplomatically and express support for the region's dominant regimes rather than any particular claims to the continental shelf.

Other voices in East Asia, however, have expressed arguably more aggressive aspirations in the Arctic. A researcher at Korea's Samsung Economic Research Institute stated, "It is necessary to strengthen the permanent observer role of Arctic Council to check monopoly by coastal states while introducing global governance in the form of an Arctic Treaty" (D.-S. Lee *et al*., 2013). Lee's statement is remarkable for two reasons. First, by using the word "monopoly," Lee manifests a sense of injustice towards the perceived complete control by the littoral states on Arctic discussions, as if to say that territory should not matter in determining who has a say. Consciously or not, his discourse reflects the participation of environmental non-profits such as Greenpeace and the World Wide Fund for Nature in protests far from their physical homes. Both Lee's statement and Greenpeace's actions reflect the "nonsovereign territorial nature of ecopolitics" (Kuehls, 1996, p. 118). Yet whereas the involvement of transnational environmental organizations in places as far apart as Antarctica and Papua New Guinea is almost taken for granted, the involvement of states in environmental areas outside of their borders elicits more suspicion. The second remarkable aspect of Lee's statement is his call for the introduction of an Arctic Treaty, which Chinese academics have also echoed. In a 2009 article in the *Journal of the Ocean University of China,* Liu Huirong and Yang Fan of the eponymous university's School of Law and Political Science criticized the "helter-skelter Arctic international law system" and the "defects in UNCLOS itself." They instead suggested, "We should proceed with the development and improvement of its relevant systems, and we can especially go forth from the special system for 'ice-covered areas' in striving for the founding of a set of new specialized systems, directed at Arctic circumstances, for the resolution of Arctic environmental issues" (in Wright, 2011, p. 10). If a government official from any non-Arctic state were to make such a bold statement, it would likely be seen as interfering, which Beijing, Seoul, and Tokyo do not want to be perceived as doing.

4.3 Constructing Polar Identities

Developing Arctic identities is about more than outward projections. It is also a project that involves constructing the "imagined community" of the nation (Anderson, 1991). Many of the Arctic states formerly saw their northern hinterlands as an exotic periphery. In the Russian imagination, from the early eighteenth century to the end of the twentieth, circumpolar hunters and gatherers were nearly invisible and served as "the most consistent antipodes of whatever it meant to be Russian" (Slezkine, 1994, p. 1). While the hinterlands of the Arctic used to be a sort of inscrutable and enigmatic northern Orient, the twentieth century witnessed many of the Arctic countries begin emphasizing historical presence in their northern regions in national narratives.[31] When non-Arctic states similarly build Arctic identities and narratives, however, these acts arouse suspicion among the more territorial and possessive Arctic states.

While there are numerous articles on the identities of Arctic states and the region's place in their popular cultures and national identities (c.f. Dodds & Ingimundarson, 2012; Bergh 2012; Manicom, 2013), less research has investigated polar popular cultures in China, Japan, and Korea, with the notable exception of Wright (2011). This gap in the literature may be because the icy north does not enjoy a vaunted place in Asian popular cultures as the site of heroic polar explorations. While the Asian states might be able to convince the Arctic states that they, too, have Arctic identities, their populations are not as easily persuaded. Asian polar narratives are essentially projects of the foreign ministries aimed at international audiences rather than national ones. Even within Arctic states, Arctic affairs are often an esoteric topic.[32] Chinese television shows on Iceland and the occasional ice floe off the coast of Hokkaido bring the Arctic closer to Asian residents' doorsteps, but the circumpolar north is still on the popular periphery. Yet perhaps the Chinese, at least, view the Arctic as closer to home than Canadian or Russian politicians might like. A cursory glance at Wikipedia, while not a reputable resource, still provides possible insight into the nation's psyche. On the English-language website for the Arctic, the map used portrays the region as all of the area north of the Arctic Circle ("The Arctic," 2013). By contrast, the map used on the Chinese ("北極," n.d.), Japanese ("북극," n.d.), and Korean ("北极地区," n.d.) Wikipedia websites

[31] For an understanding of how scientific expeditions in the north served national interests in fostering citizenship and building empires, see Bravo (2009) and Sörlin (2006), respectively.
[32] Even in Canada, where Arctic issues figure somewhat high on Ottawa's radar, the 2010 WDGF Canadian Arctic Survey found the economy to be respondents' top concern (EKOS Research Associates, 2011).

spans northern Japan and China. Unlike the Anglophone map, the Asian map notably displays the 10 degrees Celsius isotherm, a method of bounding the Arctic that covers a wider area than the Arctic Circle includes the Bering Sea.

4.4 Promoting Scientific Efforts

Crucially in the Arctic, where climate change science is high on the agenda for Arctic states, China, Japan, and Korea are highlighting their contributions to international science. The three countries are enhancing their identities as advanced nations by engaging in scientific research worldwide, and the Arctic is only one part of a global thrust. The number of co-authored papers between Chinese and non-Chinese scientists has increased (Wagner & Leydesdorff, 2005), illustrating the country's increasing international collaboration. The world share of academic publications published in China and Korea also jumped significantly from 1993-2004 (Zhou & Leydesdorff, 2006). More specifically to the poles, in *Polar Biology,* a growing amount of articles have been published by Asian states, particularly Japan (Piepenburg, 2008). It is easier for the Asian countries to carry out science in the Arctic than in places like the Amazon because of the Arctic's maritime nature. Moreover, due to the perceived urgency of climate change by thousands of scientists and several multilateral organizations,[33] the Arctic Council, every Arctic state, and much of the global community perceive polar scientific research as vital.[34]

As discussed in chapter two, Beijing focuses on state-funded "big science" efforts in the Arctic. By contrast, in Japan and Korea, a larger proportion of research and development (R&D) has historically been funded by the private sector (Sakakibara & Cho, 2002).[35] The expertise of Japanese and Korean companies in shipbuilding and offshore technology has granted them the opportunities to collaborate in areas where China has not, such as Sakhalin,[36] the Yamal Peninsula,[37] and Hammerfest.[38] Yet regardless of whether the state or

[33] In its reports and publications, the International Panel on Climate Change (IPCC) has repeatedly stressed the need for urgency in responding to climate change. 2,300 scientists signed the Fourth IPCC Report in 2007. A recent report, "*Managing the risks of extreme events and disasters to advance climate change adaptation*" (IPCC, 2012), uses the word "urgent" or "urgency" 22 times.

[34] Although policymakers from the Arctic states may vocalize their belief in the importance of polar science, this does not always translate into funding. In Canada, federal funding was cut for the Polar Environment Atmospheric Research Laboratory in Nunavut, while a freshwater research station in Northern Ontario was also closed ("Closing," 2013).

[35] In Korea, however, many of these private firms are *chaebol* protected by Korean industrial policy (Sakakibara & Cho, 2002).

[36] Japanese companies Mitsui and Diamond Gas Sakhalin (whose parent company is Mitsubishi) have a 12.5 percent and 10 percent in Sakhalin-II, respectively (Gazprom, 2013b).

private sector funds scientific research, it constitutes a form of geopolitical presence. Helicopters and submarines may carry potent geopolitical symbolism, but scientific research vessels are still painted with national colors, while scientists raise their flags at the North and South Poles. Even Antarctica, a continent that the 1959 Antarctic Treaty devoted to science, is not immune to geopolitics. During the 1957-1958 International Geophysical Year, the U.S. deliberately situated one of its research stations on the South Pole, while the Soviets had to settle for the arguably less exciting Pole of Relative Inaccessibility and the Geomagnetic Pole (Naylor, Siegert, Dean, & Turchetti, 2008). World War II legitimized the linking of scientific knowledge with national interest expressed through the military (Barnes & Farish, 2006) – a relationship that has developed in China, Japan, and Korea. Haraway (1997, p. 51) terms this concept technoscience, the fusion of "worldly, materialized, signifying and significant power" Technology and science have become interlinked with the future, progress, and modernity. The space race between the U.S. and the U.S.S.R., China's efforts to send a man to the moon, and Japan's construction of the first Asian research station on Svalbard in 1991 all attest to this notion. These demonstrations of sheer scientific capability visibly manifest the government's awesome power, an act Nye (1994) calls the "technological sublime."

Svalbard is an important place for Asian countries to materialize and signify their power and capabilities. On this remote northern island, China, Japan, and Korea have small but notable research stations. Asian officials commonly cite these physical outposts during speeches to summon evidence of presence in the Arctic. Svalbard's unique status as part of the Kingdom of Norway that is still party to the international law of the 1920 Spitsbergen Treaty has fostered the creation of an international research village. Citizens and companies from all of the treaty's signatory countries are able to visit without a visa, which has facilitated scientific access. Yet in Svalbard, there is not one large international station; instead, ten different countries have their own stations where they fly their flags, carving out tiny bits of territory onto which they can project their identities. Permanent presence is a key aspect of agenda setting. Norway's white paper, *The High North: Visions and Strategies* (2011), states, "The recent establishment of a permanent secretariat for the Arctic Council in Tromsø will put Norwegian centres of expertise in an even better position to play a part in setting the agenda for international climate diplomacy in the future" (Norwegian Ministry of

[37] Japan's JGC Corporation and France's Technip, for instance, together won the tender in April 2013 to construct the Yamal LNG plant (Reuters, 2013).
[38] Korea's Hyundai Heavy Industries won a USD $1.1 billion in February 2010 to construct and transport an FPSO to the Goliat oil and gas field northwest of Hammerfest, Norway (Offshore Technology, n.d.).

Foreign Affairs, 2011, p. 14) The creation of these centres of expertise are akin to Latour's "centres of calculation" (1987), where knowledge is accumulated following movement and circulation elsewhere.

Science is a means of demonstrating national prowess while simultaneously strengthening a country's position within international networks. Kuehls (1996, p. 41) calls the space in which knowledge is transmitted a rhizome, a term Deleuze and Guattari developed to mean a space that "connects any point to any other point" with "multiple entranceways and exits" (1987, p. 21). Even in rhizomatic space, though, ideas do not flow across a featureless plateau. Globe-spanning scientific networks are hierarchical and have positionality within them. Wagner and Leydesdorff (2005), for instance, find that China is turning into a hub for Asian science, displacing Japan. More and more Chinese scientists are co-authoring papers with other Asian scientists, while Japanese scientists' efforts are not integrated to the same extent. Still, Japan, perceiving itself as an advanced country, feels a responsibility to carry out research in places like the Arctic. This is because the Arctic is seen as part the global commons, an area similar to outer space – a different perception from the Arctic states. Koichi Wagata, a Japanese astronaut, stated at a symposium in Japan on human space exploration, "I think international collaboration is not just about working together. It allows nations that make great efforts and have competitive technological capabilities to stand on an equal footing. This applies to science as well as to human space exploration. I think this is an area that only nations with advanced technology can participate in, and thus it is the responsibility of those scientifically advanced nations to play this role" (JAXA, 2013). Scientific collaboration is still viewed through the prism of nationality, especially in areas like the Arctic and outer space where only wealthy national governments have historically been able to afford the requisite investments. So although initiatives such as the forthcoming China-Nordic Arctic Research Center in Shanghai[39] demonstrate significant cooperative efforts, Arctic science still carries a visible element of nationalism.

China, Japan, and Korea vary in their projection of national images in the Arctic, but all three emphasize their international scientific collaborations. This behavior follows the Arctic states' encouragement and formalization of polar scientific cooperation through programs at multiple scales. The University of the Arctic network brings together universities in the circumpolar north, while the IPY 2007-2008 involved 10,000 scientists from over 60 countries (World Meteorological Organization, 2011). Chinese Polar Research Institute

[39] The China-Nordic Arctic Research Center, endorsed by the SOA, will be funded by China's Polar Research Instititute (Zhenghua, 2013).

Director Yang Huigen restated the IPY's mission when he stated that China's participation helped to achieve "multidimensional polar linkages" (Yang, 2012), speaking to a networked vision of the Arctic region. KOPRI's website proclaims, "Antarctic is the sole part of the earth that can help us secure national interests through scientific research while arctic is special in light of the fact that the region requires joint development through joint research with neighboring countries...Expanding research activities on a continuous basis in these earth's last undeveloped and non-polluted regions would be the only way to secure national interests for the country" (KOPRI, 2012). This discourse legitimizes Korea's involvement in the Arctic in two ways. First, it presumes that international cooperation is necessary to pursue economic development in the region. By contrast, the Antarctic Treaty System prohibits economic development on the southernmost continent, meaning that science really is one of the few ways for a country to pursue its national interests. Second, the website greeting paints the Arctic as "undeveloped" despite the thousands of years of human settlement, again a similar emptying of the landscape similar to European imperialist discourses highlighted by Pratt (2003). If the landscape is vacated of people, then it is easier to justify the exploits of the supposedly benign and objective scientist. In his study of territoriality, Sack observes that in modern, capitalist usage, "territory becomes conceptually and even actually emptiable" (1986, p. 87). As the Arctic is symbolically emptied, Korean science – key to the nation's advances in shipbuilding – will fill the void to help secure the country's national interests. In essence, China and Korea invoke the global environmental movement to justify scientific research that, while it may benefit climate change research, will also bring national benefits both immaterial, like increased prestige, and material, such as better ships – whether scientists and diplomats openly admit it or not.

As climate change does not respect international boundaries, Japanese and Korean scientists can claim that it affects their country. A brochure from the Japanese National Institute of Polar Research focuses on the Arctic Oscillation and the way in which it affects countries at the middle latitudes, stating, "Arctic circulation patterns influence the weather of many countries, including Japan" (NIPR n.d.). Just as Russia or Canada might marshal bathymetric data to support its own seabed claims, Japan presents allegedly objective scientific data to show how the island archipelago, too, has a stake in Arctic climate change. While it is relatively easier to deconstruct the analysis of politicians, a sharp and robust analysis of the way in which scientific data is presented in the Arctic is equally necessary since science and sovereignty have a "history of entanglement" (Bravo, 2009, p. 143).

Neutrality can serve as "myth, mask, shield and sword" (Proctor, 1991, p. 262). Since scientists purport their work to be objective, we should be especially attuned to hidden intentions, geopolitical or otherwise. While various epistemic communities, from environmental groups to scientists to policymakers, have been studied to see how they affect issues such as climate change (Gough & Shackley, 2001; Toke, 1999; Wilson Rowe, 2012), more research should address how scientists affect policy debates in the Arctic, where questions of legitimacy and sovereignty are paramount.

One starting point for such investigation into scientists and legitimacy might be to borrow from Kuehls' study of "ecopolitics." He uses this term to describe environmental problems that neither domestic nor international policy can resolve, for they actually unfold in "a space beyond sovereign territory" (1996, p. 117). In the space of ecopolitics, Kuehls argues that it is risky to only ascribe authenticity to people based on their position. He elaborates, "Discourses of authenticity tend to privilege a certain politics of place that coincides with a politics of sovereign territory" (1996, p. 111). He uses the example of Midnight Oil, an Australian rock band that helped blockade a logging road in a forest slated for logging in British Columbia. The local media questioned why Australian musicians had traveled thousands of miles to protest deforestation in a country far from home. Kuehls states that the critique of Midnight Oil's involvement in Canadian environmental politics "elucidates the nonsovereign territorial nature of ecopolitics, the extent to which the logging of the temperate rain forests on Vancouver Island is not confined to the geopolitical boundaries of this sovereign territory but is bound up with a global market for wood products" (1996, p. 118). The media would be less likely to question scientists as to why they are present in an area outside their home country. But answers to such questions would be enlightening, as Arctic science is entangled with globe-spanning issues of climate change, shipping, and commodity chains. When China's *Xue Long* sailed to the Atlantic and back in the summer of 2012, the Polar Research Institute of China stated that the icebreaker acquired "practice for our nation's ships that use Arctic passages in the future" (Associated Press, 2012), openly linking science with commerce. *The Siberian Times* (2012) portrayed the voyage in a more militaristic light, pronouncing: "China's snow dragon conquers the Arctic, opening up an ocean route linking Asia and Europe." Perhaps, then, certain media outlets are already questioning the supposedly benign nature of scientific expeditions.

4.5 A Global Ordering of the Arctic

Through a promotion of a global polar culture and pursuit of collaborative science, Asian states are putting pressure on the accepted rules of engagement even while working within their confines. In the new ordering of the world, "spatial configurations and spatial boundaries are no longer necessarily or purposively territorial or scalar, since the social, economic, political and cultural inside and outside are constituted through the topologies of actor networks which are becoming increasingly dynamic and varied in spatial constitution" (Amin, 2004, p. 33). Chinese, Japanese, and Korean identities in the Arctic rest on perceiving the region as a deterritorialized, networked space of flows for science, investment, and even identity, given their promotion of a global polar culture. These countries are attempting to become hubs in the network of Arctic science and expertise – that is, centres of knowledge production – and build the "permanent" (if also occasionally mobile) infrastructure, like research stations and icebreakers, needed to ensure the mobility of scientists and sailors alike in the Arctic. The Asian countries' activities are challenging what Craciun calls the "imperialized centres of the northern hemisphere" (2009, p. 104), which in the past century dominated the world from the top of the planet. By reconceptualizing the Arctic as both a networked region and a global space, China, Japan, and Korea are not just upsetting the preponderance of the Arctic states in the region-as-territory, but also destabilizing the structural integrity of the state system itself in the Arctic.

Chapter 5

North Pacific Arctic Region Building

The Arctic Council's perception of the Arctic as encompassing countries with land north of the Arctic Circle does not match the areas of economic activity concentrated in the North Pacific and the North Atlantic. The organization's perception of the Arctic is primarily based on possessing northern territory but also on a somewhat shared notion among the Arctic states of polar heritage and northern identities.[40] The Arctic states marshal these factors to claim responsibility for environmental stewardship in the Arctic Ocean. Yet a policy of ecosystem-based management, like that of the Arctic Council, does not work neatly in maritime environments. The porous, permeable nature of the seas makes them susceptible to influences carried from far away by ocean currents. Moreover, distant countries can project power at sea without an adjacent coastline thanks to the rights of naval and commercial ships to innocent passage. The environmental and political permeability of oceans mean that geopolitics plays an especially strong role in maritime spatial planning. Suárez de Vivero *et al*. (2009, p. 631) find that in the ocean, "the strict national framework is breached as the planning is done in a fluid environment where decisions, interventions, and actions cannot be contained/limited to areas inside national jurisdiction boundaries." The increasing abilities of China, Japan, and Korea to project maritime power in the Arctic Ocean further complicate attempts to manage and govern its high seas. Yet since few ships currently sail in the Central Arctic Ocean, a more useful strategy for China, Japan, and Korea might be to transform their proclamations of being "near-Arctic states" into actual region building in the heavily used space of the North Pacific.

[40] Although Steinberg later acknowledges that "ocean-space, like land-space, serves a crucial role in the reproduction and development of the world-system" (2001, p. 24), the Arctic littoral states, particularly Canada, are almost trying to seamlessly unify their ocean-space to their land-space and make them more of the national core rather than the periphery.

5.1 The Arctic's Spatial Mismatch

Although the Arctic states realize that many of the region's environmental problems span political boundaries, this appreciation has not stopped them from erecting new environmental boundaries in their place. Larsen (2005) maintains that the production of environmental boundaries makes possible the erosion of political boundaries. Yet especially in fluid maritime areas, the production of boundaries is a pointless exercise for regulating the environment. In the Arctic, the greater importance of demarcating the region's bounds may be the creation of an inclusive identity for the Arctic states while excluding Asian countries. Canada and Russia, the two countries the most occupied with sovereignty, are also the most concerned with drawing strict environmental boundaries around the Arctic. Attempts to enclose the Arctic Ocean follow a general global trend of regionalizing maritime space, whereby "the projection of coastal regions over their adjacent waters (similarly imprecise) can also be included as one more way maritime space is being regionalised" (Suárez de Vivero *et al.,* 2009, p. 633). Steinberg (2001, p. 24) argues that the ocean cannot be slotted into any of the three categories of space that world-systems theorists have devised: core, semi-periphery, or periphery. Yet in the Arctic, the imperative to bound and regionalize maritime space is causing countries to incorporate their ocean peripheries into their national territories. Parks Canada is creating a national maritime park in Lancaster Sound at the Northwest Passage's eastern entrance, while the agency also leads multiple searches for British Arctic explorer John Franklin's lost ships.[42] As Deleuze (1994, p. 385) explains, "One of the fundamental tasks of the State is to striate the space over which it reigns, or to utilize smooth spaces as a means of communication in the service of striated space. It is a vital concern of every State not only to vanquish nomadism but to control migrations and, more generally, to establish a zone of rights over an entire exterior, over all of the flows traversing the ecumenon." Quests to draw borders in the Arctic Ocean are deliberate attempts to regulate flows of ships, oil slicks, scientists, and capital.

The pressure from non-Arctic states to redefine the Arctic threatens the Arctic Council's prerogative in defining the region's extent. This is an unsettling geopolitical development for the Arctic Council because since its inception, the organization has helped to spatially order and temporally arrange the Arctic region (Dodds, 2012). Particularly as the

[42] For more on Parks Canada and the search for the Franklin ships, see Craciun (2012). In the 1820s, the British Colonial Office actually requested of Franklin to "amend the very defective geography of the northern part of North America" (in Craciun, 2012, p. 472).

new chair of the Arctic Council, Canada is creating an "imagined community" (Anderson, 1991) in the Arctic by emphasizing a theme of "development for the people of the North" and "Northerners first" (Foreign Affairs and International Trade Canada, 2013). Canada is creating a strong inside-outside dynamic while the Nordic countries promote a more global envisioning of the Arctic. This difference exposes the constructed nature of the Arctic region. Political actors in southern capitals are the Arctic's "region-builders," to borrow Neumann's term (1994). They do the work of imagining "a certain spatial and chronological identity for a region, and [disseminating] this imagined identity to others" (Neumann, 1994, p. 58). If all region-building projects are attempts to discourage competing efforts that might impose a different regional ontology (Neumann, 1994, p. 67), then the Canadian-led region-building effort in the Arctic is essentially a defensive project to ward off non-Arctic actors from encroaching on the region's perceived territorial periphery.[43]

While the Asian states are attempting to convince the Arctic Council of the legitimacy of their actions, the Arctic Council, too, is undergoing a crisis of legitimacy and an internal debate over whether to pursue inclusivity or exclusivity. Swyngedouw (2004, p. 33) draws attention to "the tensions between the rhizomatic rescaling of the economic networks and flows on the one hand and the territorial rescaling of scales of governance on the other." As the economic networks in the Arctic are rhizomatically rescaled, Canada and Russia seek to base Arctic governance on the possession of territory north of the Arctic Circle while the Nordic countries are more open to rhizomatically rescaling of the organization. At a KOPRI symposium in March 2013, the Danish Ambassador to South Korea stated, "The Danish position is that we welcome new observers. They'd add to the work of the Arctic Council and task forces. I don't really care if there are 30 observers – it's not going to dramatically change the workings of the Arctic Council. Networking is important, and presence is important" (Hansen, 2013). The Ambassador's use of the words "networking" and "presence" demonstrates an understanding of the significance of the new relational, networked geography of the Arctic in which states can be "present" without territory and yet still contribute to the Arctic Council's mission.

[43] The Arctic has not always been imagined as a circumpolar space, as Russia and Canada used to view each other as "mirror images" and relations are still sometimes adversarial (Lackenbauer, 2010). Thanks to the Arctic Council's region-building efforts, however, Kim and Blank posit that East-West discord in the Arctic has been resolved, notably through the Barents Sea Agreement between Norway and Russia. Tensions between Asian and Russia countries – essentially, non-Arctic and Arctic – have replaced the former discord between the Arctic states themselves (Kim & Blank, 2011, p. 305).

5.2 The Arctic as an Asian Periphery

The Arctic is no longer just a periphery for Europe and North America as it was for the past several centuries. Russia has always been aware of its "singular position between Europe and Asia" (Kerr, 1995, p. 978) and despite its historically ambiguous, even reluctant relationship with Asia, it has lately been gravitating towards working with Northeast Asia to develop its sub-Arctic areas.[44] During a 2010 visit to the Far East, former President Dmitry Medvedev remarked, "Developing strategic ties with countries of the Asia-Pacific region is an important part of the Far Eastern strategy"[45] (in Hong, 2012, p. 11). China, Japan, and Korea now see themselves as part of the core and are consequently treating the Arctic as a resource periphery. The extent and location of the periphery for these three countries has changed over time. China, long concerned with defending its territorial integrity, began constructing the Great Wall in the second century BC. The concept of the periphery in Chinese thought extends beyond the country's physical border. One Chinese scholar told a group of American congressmen that the Middle East had become "a part of China's salient periphery in a way that it had not been when China had been self-reliant in oil prior to 1993" (in Lampton, 2008, p. 34). By that token, if the Arctic becomes a crucial source of hydrocarbons to China, it could form part of that "salient periphery." Likewise, Korean literature reveals that companies are considering making the Arctic a center of investment on the periphery in the country's quest for natural resources. A Korean Economic Trends report states that further Korean resource development in the Arctic is likely to use KOGAS' Canadian investments as a "springboard" (D.-S. Lee *et al.,* 2013, p. 11). Finally, Japan is the one Asian country that has contained a part of the Arctic within its political borders before. In 1942, imperial Japan's borders extended from southernmost Indonesia, near the equator, to the Aleutian Islands of Kiska and Attu in present-day Alaska. Japan sought possession of these two strategic islands partly because they would permit control of the Great North Circle Route.[46] A few years prior, in 1935, U.S. General Billy Mitchell expressed a similar sentiment. He proclaimed to Congress, "I believe that in the future, whoever holds Alaska will hold the world. I think it is

[44] For a historical overview of Russia's relationship with both Europe and Asia and its transformation into more of a Eurasian power, see Kerr (1995).
[45] On Russia's strategy in its Far East region, see Rozman (2008).
[46] The Aleutian Islands themselves are a periphery of the periphery: the Arctic Marine Assessment Program (AMAP) area "essentially includes the terrestrial and marine areas north of the Arctic Circle (66°32'N), and north of 62°N in Asia and 60°N in North America, modified to include the marine areas north of the Aleutian chain" (AMAP, 2013).

the most important strategic place in the world" (in Zellen, 2009, p. 167). This belief echoes Mackinder's idea of a pivot area whose possession would be the key to unlock world domination (1904), except that in this case, the pivot is not continental Eurasia. It is maritime Alaska. Although hyperbolic, General Mitchell's statement touched upon the importance of the North Pacific in connecting Asian and North American markets. Despite the advancements of air travel, shipping (especially in an age of just-in-time delivery) is still important for global markets today. Castells conceives of a "network society" and "space of flows" (1996), while Cairncross (2001) heralds the "death of distance" and the ease with which fiber optics transport ideas.[47] Yet goods still need to be moved out of resource peripheries like parts of the Arctic to core markets in places like Asia, so proximity matters – especially when LNG takes only three days from Sakhalin instead of three weeks from the Suez Canal to reach Japan (Narod, n.d.).

5.3 Cohering the North Pacific Arctic Region

The densest area of connections between Asia and the Arctic is in the North Pacific, where the Asian states have their closest entry point to the Arctic Ocean. The North Pacific Arctic is already an economic region given the density of trade, shipping, and fishing. The Northeast Asian countries are simultaneously local participants in the North Pacific and global participants in other parts of the Arctic. Neither China, Japan, nor Korea consider the North Pacific Ocean or the Arctic Ocean to be *mare nostrum,*[48] as they instead portray the Arctic as a *mare liberum*[49] – a sea open for navigation. But the extensive trade links between China, Japan, Korea and the Russian Far East, Alaska, and British Columbia demonstrate the rise of the North Pacific as Asia's Arctic near abroad. Blatter (2004) states that peripheral border regions are important laboratories of change in the globalizing world. Border areas such as those in the North Pacific are redefining the larger Arctic region itself by demonstrating its relations to global markets. Furthermore, despite Kim and Blank's assertion (2011) that tensions between Asia and Russia are rising, Russia, Japan, and Korea have recently intensified cooperation. Japanese Prime Minister Abe's visit to Moscow to discuss energy, trade, and foreign policy epitomizes this turn. In addition, in 2012, Canadian Prime Minister

[47] Even ideas may not flow untrammeled. Research using patent citations as a paper trail to track the spread of ideas shows "international borders present a persistent barrier to spillovers" (Thompson, 2006).
[48] The Romans called the Mediterranean *mare nostrum,* or "our sea," implying a sense of domain or ownership. Ermashev claimed in 1943 that the Americans sought to make the Arctic a new *mare nostrum,* while Wells (1986) purports that the Soviets wished to do so by turning it into a "Soviet lake" (in Horensma, 1991).
[49] Grotius (1964) is the first to conceive of the notion of *mare liberum,* or "open seas," in 1625.

Stephen Harper traveled to Japan, Korea, and Thailand to discuss energy and free trade (Berthiaume, 2012), highlighting the increasing importance of Asia to the country's economy and foreign policy.

China, Korea, and Japan could build upon their claims as "near-Arctic states" to actually produce a Pacific Arctic region centered on the parts of their countries that are in fact nearest the Arctic. Russia and the northwest coast of North America could be plugged into such a region through trade ties and rhetorical framings. Calder (2012, p. 1) claims that in a globalized world, "mini-lateral configurations are also assuming growing importance, especially for specialized functional purposes." He specifically proposes trilateral cooperation in the North Pacific between Japan, Canada, and the U.S. Enlarged regional cooperation across the North Pacific to also include China, Korea, and Russia would parallel the post-Soviet formation of the BSA, which Lehti (2003) argues was a Scandinavian project from its inception. The creation of the BSA turned the Baltic countries and even parts of northwest Russia into a "nordic near abroad" (Lehti, 2003, p. 216). Although the BSA was grounded in Sweden's history and national narratives of being a former sea power in the Baltic Sea, it was also forward facing in that it was conceived of being an "alternative European centre, a future region" (Lehti, 2003, p. 216). Similarly, China, Japan, and Korea could try to turn the North Pacific into an alternative Arctic center distinct from the circumpolar region-building efforts in the North Atlantic emanating from and converging on Norway, most notably with the June 2013 opening of the Arctic Council's Permanent Secretariat in Tromsø.

An effort to create a North Pacific Arctic region would also parallel the development of the Barents Region, which combines traditionally "Arctic" and "near-Arctic" areas. In 1993, foreign ministers meeting in Kirkenes, Norway proclaimed into existence the Barents Region, essentially an amalgamation of Arctic, Baltic, and North Sea areas (Neumann, 1994). This declaration sparked political efforts such as the Barents Euro-Arctic Council, an intergovernmental organization, and the Barents Regional Council, an interregional organization bringing together regions from Norway, Sweden, Finland, and Russia. Political aspirations have turned into tangible measures on the ground to bring the region closer together, at least in terms of transportation links, by improving rail and road connections. Whereas most of the current connections are between northern destinations and their southern capitals, discourse about a Barents region has helped physically connect the space. Furthermore, efforts by authors such as Bengt Pohjanen to conjure an imagined community

stretching from Bodø to Naryan-Mar combat the image of Russia as the "Other," instead incorporating it into a regional community (Heith, 2007). Given the success in creating a Barents region in a once divided, war-torn area,[50] it is reasonable to speculate about the prospects of forming a Pacific Arctic region. If politicians and policymakers from China to British Columbia put more efforts into casting the area in a unified light, this discourse could result in greater physical linkages between locations in the North Pacific, and, eventually, perhaps shared norms. Ultimately, the process of region building promotes confidence-building measures between countries (Ravenhill, 2000, p. 201). In the Barents Region, Norway and Russia gained enough mutual trust to finally agree to delimit their Barents Sea boundary after 40 years possibly thanks to discourse about the Barents Region. Yet confidence-building measures and regional frameworks differ. Whereas the former are designed to increase trust between two countries that might otherwise be at normative odds, the latter actually try to build shared norms.

The main efforts at cooperation in the North Pacific have focused on commerce rather than identity. In the 1970s, in the spirit of the regionalization of maritime areas, policymakers and fishing industry representatives turned the North Pacific from "a space of overlapping domestic use in the global commons into a region divided into separate national territories" (Mansfield, 2001, p. 1808). At the same time, they "constituted it as a region based upon economic integration across national borders" (Mansfield, 2001, p. 1808), helping to manage the North Pacific fishery for Alaska pollock, one of the world's largest and most valuable fisheries (NOAA, n.d.). Yet besides bolstering the North Pacific's economic ties, the Asian states could harness the small but significant existing links that bind peoples and cultures around the North Pacific. A model exists around the Atlantic Ocean, where the United States, Canada, Iceland, Norway, and the United Kingdom have helped foster a North Atlantic identity (Taylor, 1991). Nineteenth-century European travellers and explorers perceived the Atlantic as **"**the borderlands of the civilized, European world" (Oslund, 2005, p. 92). But the ocean has shrunk to a small pond, and the North Atlantic has become both an American and European space under the security umbrella of the North Atlantic Treaty Organization (NATO). Only tourist agencies market Iceland's exoticism, now almost seen as a desirable commodity.

[50] Not all tension has disappeared in the Barents region. The 2007 riots by ethnic Russians in Estonia and Russia's alleged cyberattacks on Estonia, carried out in revenge for the country's relocation to a cemetery of the *Monument to the Liberators of Tallinn*, a Soviet statue that locals simply call the *Bronze Statue*, exemplifies residual animosity.

North Atlantic region building implies that similar efforts in the North Pacific are possible. In fact, some strands of a shared memory may already exist. Japanese anthropologists traipse around eastern Siberia seeking out ties to their country's indigenous people, the Ainu (P. Vitebsky, personal communication, May 24, 2013) – included as an indigenous Arctic people in Walter Dallman's map for the Arctic Human Development Report (Einarsson, Larsen, Nilsson, & Young, 2004). From 1898-1945, Russia, followed by Japan, controlled the northeastern Chinese city of Dalian, strategic for its ice-free port. Today, Dalian's LNG terminal could receive Russian gas extracted with the help of Japanese technology, recreating the presence of previous foreign powers in the shape of capital flows. Additionally, a new flight service between Dalian and Irkutsk, Russia is materializing past connections through improved transportation linkages, with a local newspaper stating that the service makes Irkutsk "better connected as it links up with Russia's past" (Baklitskaya, 2013). But regional connections are not always apparent, for upon the 2012 reopening of flights between Siberia and Alaska, Vladivostok Air's American representative expressed, "Now the great unknown is only four hours away" (Calkins, 2011).[51] The unknown, however, may already be known to local residents, as "Siberia has long been a popular destination for American hunters and fisherman" (Calkins, 2011), and Anchorage School District was the first ever in the U.S. to start a Russian language immersion program (UAA, 2013). Moreover, indigenous peoples living on both sides of the Bering Strait were once familiar with the "great unknown," as they routinely crossed to the other side until the "Ice Curtain" descended in the Cold War (Schweitzer & Golovko, 1995; Sheldon, 1989).

A venue for North Pacific cooperation may already exist: the often overlooked Northern Forum. This multilateral organization traces its origins to the First International Conference on Human Environment in Northern Regions hosted by the governor of Hokkaido in 1974 (The Northern Forum, n.d.). The Northern Forum includes 18 different northern regions, including Gangwon (Korea), Heilongjiang (China), and Hokkaido (Japan) – a clear case of Asian political integration into northern affairs. Trade and education are typically the main issues of discussion (Huebert, 1998), and the subnational participants involved often have common interests not necessarily shared with their national governments (Young, 2005). These Asian regions could tighten coordination with fellow Northern Forum members in the North Pacific: the Russian Republic of Sakha and the Chukotka Autonomous

[51] Yakutia Air actually ended up operating the flights.

Okrug, the state of Alaska, and Canada's Yukon Territory.[52] The degree of independence that the regional governments have in making economic and political decisions varies. Yet even in Russia, where Putin has moved to centralize power, regional forces remain "a force to be reckoned with" (Hyde 2001: 736). Similarly in China, Beijing "called Heilongjiang officials to task for their inadequate administration of regional trade with Russia" (Wishnick, 2001, p. 810). Cities in Hokkaido, Primorskii Krai, and Alaska are in some cases closer to each other than they are from their respective national capitals thousands of miles away, making coordination in areas such as shipping logistics and the environment a real possibility.

Visions of sub-national regional collaboration in the North Pacific may help to redefine the imagined community of the Arctic while revealing alternatives to the Arctic Council's state-based cooperation. Promoting region-building measures in the North Pacific could also grant the Asian countries the keys to further projecting power throughout the wider Arctic as global actors. Yet as Healey (2004, p. 65) writes, there is "no easy answer to developing a locally-relevant relational spatial conception and vocabulary." A shift towards a form of governance that is simultaneously locally and globally relevant, accounting for all the mobilities, relations, and hubs and spokes of the North Pacific, would require complicated scale-jumping where local planners might consult with national ministers and circumpolar indigenous groups. Swyngedouw explains, "An inclusionary politics of scale necessitates a vision and strategy in which the current one-sided obsession with a politics of identity in which the body has become a central site is replaced by a rescripting and reconstruction of groups affinities" (2000, p. 74). The Arctic Council may already represent a progressive form of governance, but it is still grounded in the primacy of the nation-state and the structuring of an exclusive northern identity. Although it is making overtures to non-Arctic states by admitting them as observers, it is simultaneously strengthening regional cooperation and hardening the Arctic/non-Arctic binary. Furthermore, it may even be becoming a more traditional type of regional organization with a more permanent, rather than mobile, politics. Its permanent secretariat is located in the same building as the Norwegian Polar Institute in Tromsø, showing the success in the Norwegian government in creating "centres of expertise" that physically collocate institutes of national science and multinational governance.

[52] Of the subnational units surrounding the North Pacific, British Columbia, Magadan, Khabarovsk, and Sakhalin are not members. Koryak, Kamchatka, and Primorskii Krai are Partner Regions rather than Full Member Regions.

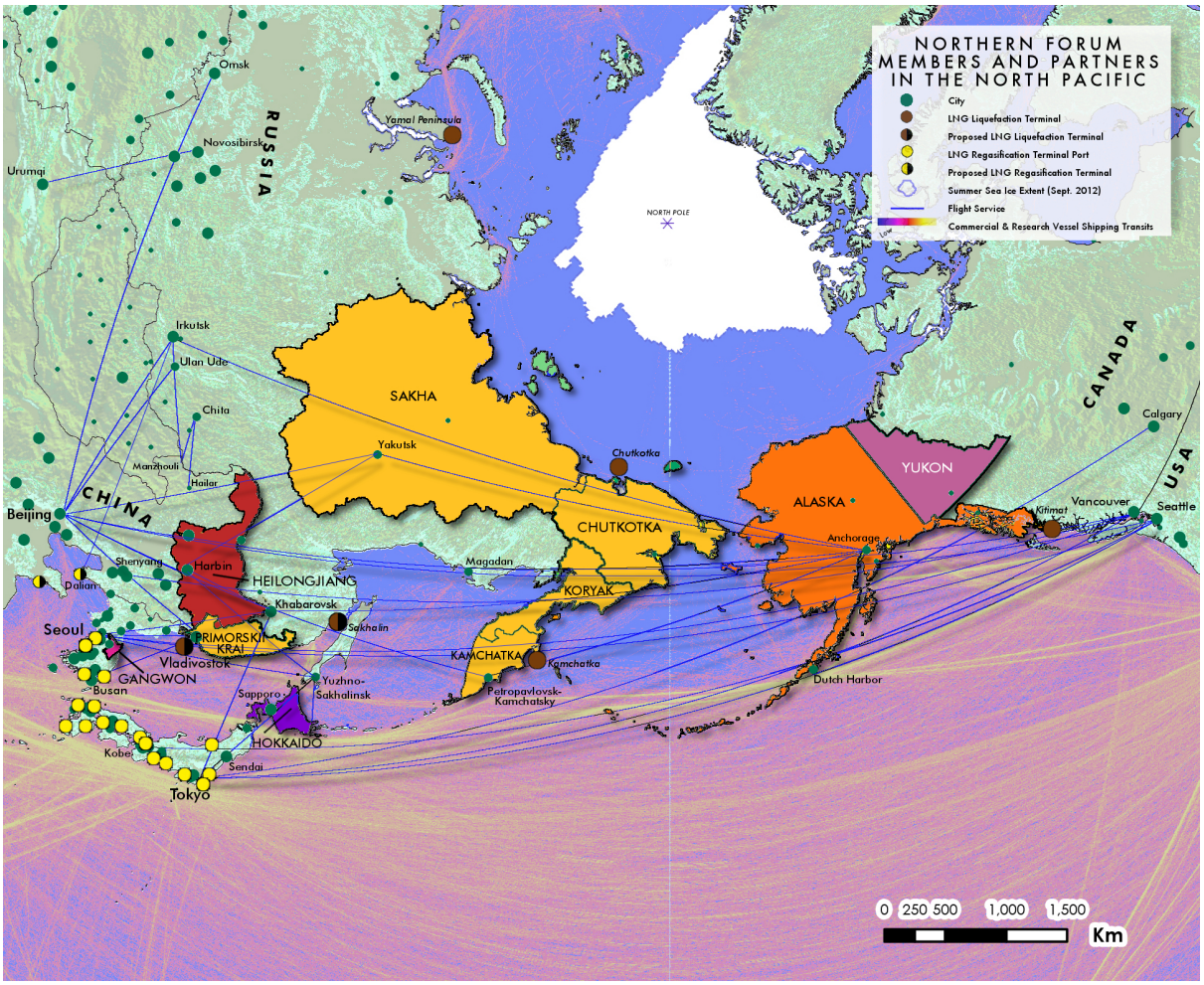

Figure 5.1 *The Northern Forum Members and Partners in the North Pacific.*

Furthermore, the establishment of a permanent secretariat symbolizes the growing entrenchment of the Arctic Council within the space it demarcates as Arctic.

So far, as illustrated in chapter three, China, Japan, and Korea have instrumentalized the high seas of the Arctic rather than the near abroad of the North Pacific in their attempts to legitimize their polar activities. Even though China, Japan, and Korea rarely transit the high seas of the Central Arctic Ocean, they marshal its status as a global commons to promote their globalized visions of the Arctic. As such, there is a disparity between the economic region of the North Pacific where the Northeast Asian states are highly active and the perceptual region of the Arctic that they promote as a global space. Capitalizing instead on their relative proximity to the Arctic through the North Pacific, especially where the coastline connects activities at sea with activities on land, could possibly legitimize their activities in the Arctic. In the ports of Tobata, Vladivostok, and Dutch Harbor, the new mobilities of the Arctic are taking shape. The Korean-built, Russian-owned LNG tanker delivering Norwegian

gas to Japan along the NSR epitomizes these linkages. Such corridors of transit and movement can serve as the backbone for region-building processes. For instance, in the United Kingdom, the government has drawn up regions for investment such as the M11 corridor, Thames Gateway, and The Northern Way (Macleod & Jones, 2007). These areas appear to be based on railroads, motorways, and rivers, "all emphasizing mobility, linkage, networks, connectivity" (Macleod & Jones, 2007, p. 1184). This relational ontology could one day apply to the NSR or the Great North Circle Route. Macleod and Jones (2007, p. 1184) term these transit areas "relationally networked region(s)." Castells (2008, p. 82) argues that the management of global problems at the nation-state level leads to a crisis of efficiency. But as region building at the subnational level in the North Pacific would be based on connectivity, this could improve efficiency in governing and managing usage of the area. As it stands, the chief obstacles to region-building efforts in the North Pacific are twofold: first, the desire in Beijing, Seoul, and Tokyo for region building in Northeast Asia is weak.[53] Second, it is possible that voices in the Arctic Council could view the creation of a North Pacific Arctic region as a rival rather than as a useful tool for managing an existing economic region.

5.4 A New Developmentality in the Arctic

While China, Japan, and Korea are building links in the North Pacific, they are simultaneously investing in distant locales, suggesting an eventual need to reconceptualize the wider Arctic region. The Danish Ambassador quoted in chapter four is correct in noting that presence is important in the Arctic, yet it is important to distinguish between the presence of a foreign scientist and the presence of a foreign oil worker. Whereas Kuehls argues that the goal of natural resource development, or "developmentality," was once to make resources suit the needs of the state, today, resources serve global capital. Developmentality thus "requires a shift in control from the local to the global" (1996, p. 78). For natural resources to serve international capital, foreign investors and multinational corporations must control them. As a resource periphery, the Arctic is a prime example of this shift in power. This transformation also weakens the Arctic Council's ability to define the region as a territorially bounded unit. Yet whereas Kuehls claims that the agents behind

[53] For Chinese perceptions on regional security in Northeast Asia, see Rozman (2011). For Korea's perspective, see Konishi and Manyin (2009). For Japan's view on cooperation in the Asia-Pacific region, see Okawara and Katzenstein (2010).

global capital do not consult local populations, a novel form of developmentality may actually arise in parts of the Arctic where indigenous groups have a significant amount of autonomy, such as in Greenland or Canada. Greenland's newly elected prime minister, Aleqa Hammond, declared, "We are not giving up our values for investors' sake" (MacAlister, 2013). Though flows of Asian capital may still make the resources flow out, locals may demand consultation with Asian businessmen before extraction can begin, representing a new shift in developmentality.

The new economic space of the Arctic is not entirely rhizomatic, as foreign states, particularly Asian ones, and multinational corporations vertically impose many of the flows of capital and people. Yet these vertical impositions could actually generate rhizomatic cross-cultural encounters between Asia and the Arctic. Plans to build mines in Greenland staffed by thousands of Chinese employees would create what Ferguson (1998) termed "enclaves" in his study of railway projects and mines in Zambia's Copperbelt region staffed by African guest workers. Companies do not always succeed in keeping the enclaves separate from the surrounding milieu constituted by the local people and environment. In the Nenets Autonomous Okrug, fly-in Russian oil workers and the local reindeer herders covertly exchange diesel and reindeer meat (R. Rouillard, presentation, May 28, 2013). Resources from the tundra to the multinational oil corporation continue to flow vertically outward, but at the same time, horizontal networks radiate from the enclave to surrounding local communities. Yet in the new developmentality that may unfold in the Arctic, investments may extend beyond commercial, extractive transactions and actually be deliberately horizontal and rhizomatic: recall the *Beijing Review* editorial (Baozhi, 2013), which recommended that China should emphasize its identity as a "public goods provider" to people in the Arctic. In the same vein, Japan might choose to publicize projects with perceived benefits to northern residents, such as a recent ten-kilometer bridge that Russian First Deputy Prime Minister Igor Shuvalov has invited the country to build between Sakhalin and mainland Russia ("Shuvalov," 2013), over pipelines and mines, which are perceived as more extractive technologies. Depending on domestic politics, opportunities to act as a "public goods provider" may abound in infrastructure-poor places like Greenland, Northern Canada, and possibly even Iceland as it recovers from the economic crisis of 2008.

5.5 Relational Networks, Subnational Spaces

Relational networks in the Arctic are bringing together vastly disparate areas north and south of the Arctic Circle in a way that seemingly weakens the importance of territory. But proximity continues to influence economic relations in the Arctic, and melting sea ice and new technologies are challenging previously held conceptions of proximity. There are still important contiguous areas that are hubs of economic activity, namely the North Atlantic and North Pacific. Multilateral efforts to enable region building and ultimately governance along international throughways such as the NSR are probably a long way off (although the recent memorandum of understanding between Norway and Korea to promote shipping along the NSR may be a precursor).[54] In the meantime, the sub-national regions bordering the North Pacific maritime space can enhance region-building measures through discourse that builds upon and accentuates the region's connections, perhaps with the Northern Forum as a starting point. China, Japan, and Korea can frame the North Pacific periphery as not only an Arctic space, but actually as their Arctic near abroad. This would establish a territorial foundation from which they could demonstrate their cooperative intentions and project influence farther north into the Arctic. Whether the Arctic Council would prefer an argument from the Northeast Asian countries for Arctic legitimacy based on proximity rather than more tenuous tropes such as a "global polar culture" remains to be seen.

[54] On the memoranda of understanding signed between Norway and Korea, see Bennett (2012).

Chapter Six

Conclusion

Depicting the Arctic as an isolated, impenetrable, and frozen space overlooks the region's integration with other parts of the world in the present and throughout history. Networks and relations are a crucial aspect of activities in the circumpolar north, especially when scientific collaboration and natural resource extraction require large amounts of capital and cooperation. In this light, the Arctic Council's promotion of "self-sufficient" Arctic communities (Arctic Council Secretariat, 2013) ignores both the realities of export-driven, commodities-based northern economies and the interconnected nature of Arctic communities. Instead, fostering ties with areas south of the Arctic Circle that demand the Arctic's resources may actually provide more fruitful results for Arctic communities if economic development is the main goal. The Arctic Council's approval of the Asian countries' applications for observer status demonstrates the body's acknowledgement of the globe-spanning consequences of Arctic issues, whether environmental or economic.

Flows of capital, goods, and people are connecting Chinese consumers with mineral deposits in Greenland and Korean engineers with Russian oil oligarchs. The Arctic's maritime nature makes it both accessible and important for the seafaring powers of China, Japan, and Korea. Their commercial interests in the Arctic involve shipping, hydrocarbons, and fisheries. Yet questions of identity and power projection are also paramount. The Arctic allows the Northeast Asian countries a forum to display their growing capabilities through scientific endeavors and maritime transits. Though peaceful, these displays still have geostrategic undertones. An analysis of scientists' and policymakers' discourse reveals a disparity in the attempts of countries like China to situate themselves as near-Arctic, which underscores the continuing importance of territory and proximity, while at the same time promoting a global polar culture. Instead, China, Japan, and Korea could arguably pursue a strategy of region building in the North Pacific – their Arctic near abroad – as a foothold into the Arctic.

The Arctic is arguably on the front lines of climate change, but it is also on the front lines of experiments in governance. If Heilongjiang, Gangwon, and Hokkaido work with subnational governments in Russia, the U.S., and Canada to govern the North Pacific, this

could increase the confidence of Russia and Canada, the two Arctic states most concerned with sovereignty, in working with their Northeast Asian neighbors. China, Japan, and Korea could then cultivate the ties necessary for broader multilateral cooperation in the Arctic. Cooperation based on the Northern Forum would still privilege territory and proximity. But fundamentally, governance does not have to be fixed to territory. A more mobile politics would suit the growing mobilities of the Arctic, especially in the North Pacific and, later, along the NSR. Governance based on such corridors, however, might further obscure the uneven nature of development in the Arctic by focusing on the wormholes that allow rapid export of northern commodities to the core.

A useful way to build confidence and possibly even overlapping identities between the Arctic and Asian countries might be to cultivate a shared memory of experiences, elevating transactional, commercial relationships to something more substantive. While the western media sometimes responds incredulously to Asia interest in the Arctic, it was only seventy years ago that Arctic and Asian countries came to blows in the sub-Arctic. A Japanese website documenting a ceremony held in Dutch Harbor, Alaska in 2002 to commemorate the World War II Aleutian Islands Campaign between the United States, Canada, and Japan avows, "You will never be able to forget that we patriots committed to fight each other in this area of severe weather" ("Attu," 2002), underscoring the fragments of shared experience that persist in the North Pacific. Moreover, northern residents, long ignored by their southern capitals, may be happily receptive to foreign investment. Following the KOGAS delegation's visit to the Northwest Territories to explore building an LNG terminal, the mayor of Tuktoyaktuk expressed, "They were even willing to help us get natural gas into Tuktoyaktuk. Our own government can't do that, but a foreign country wants to help us. They're good people" (Vanderklippe, 2011). Shared identities in the North Pacific could translate into regional governance based on lines of human activity and experience that radiate outward to other parts of the planet rather than arbitrary lines like the Arctic Circle. For as Craciun (2009, p. 109) writes, "The Arctic is not an uninhabited, timeless waste found on the fringes of the planet – it inhabits a centre. The most obsessive Northwest Passage seekers always recognized this." Beijing, Tokyo, and Seoul now do, too.

References

Alaska Humanities Forum. (2013). Interior Alaska: The Yukon River and its people. *Alaska: History and Cultural Studies*. Retrieved on June 11, 2013, from http://www.akhistorycourse.org/articles/article.php?artID=56.

Alden, C., and Alves, C. (2008). History & Identity in the construction of China's Africa policy. *Review of African Political Economy,* 35(115), 43–58.

Allott, P. (1992). Mare nostrum: A new international law of the sea. *The American Journal of International Law,* 86(4), 764–787.

Amin, A. (2004). Regions unbound: Towards a new politics of place. *Geografiska Annaler, Series B: Human Geography,* 86(1), 33–44.

Amin, A., & Thrift, N. (1994). Living in the global. In A. Amin & N. Thrift (Eds.), *Globalisation, Institutions and Regional Development in Europe* (1-22). Oxford: Oxford University Press.

Anderson, B. (2006). *Imagined communities: Reflections on the origin and spread of nationalism*. New York: Verso Books.

Arctic Council. (1996). *Declaration of the Establishment of the Arctic Council, 1996*. Retrieved June 13, 2013 from http://www.cfr.org/arctic/declaration-establishment-arctic-council-1996/p30733.

Arctic Council. (2009). *AMSA (Arctic Marine Shipping Assessment) (2009)*. Retrieved June 13, 2013 from http://www.pame.is/amsa/amsa-2009-repor#sthash.JLpkZvBX.dpuf.

Arctic Council Secretariat (2013). *Kiruna Vision*. Retrieved June 13, 2013 from http://www.utanrikisraduneyti.is/media/nordurslodir/Kiruna_Vision_for_the_Arctic_Final.pdf.

Associated Press. (2012, September 27). China ships sails to Atlantic and back, via Arctic. *The Associated Press*. Retrieved from http://bigstory.ap.org/article/china-vessel-sails-atlantic-and-back-artic.

EKOS Research Associates. (2011, January). *Rethinking the Top of the World: Arctic Security Public Opinion Survey*. Ottawa: EKOS Research Associates.

Åtland, K. (2008). Mikhail Gorbachev, the Murmansk Initiative, and the desecuritization of interstate relations in the Arctic. *Cooperation and Conflict,* 43(3), 289–311.

Attu Rising Sun Return (アッツ島日章旗返還). Retrieved June 11, 2013, from http://www.geocities.co.jp/HeartLand/2682/flag.html.

Babson, B. (2012, October 31). A 'pipe dream?' Russia, North and South Korea's pipeline quest. *The Diplomat*. Retrieve from http://thediplomat.com/2012/10/31/russias-pipeline-dreams-in-korea/.

Bak, L. M. (2008, August 15). A great people with new dreams. *Presidential Speeches*. Retrieved June 11, 2013 from http://www.korea.net/Government/Briefing-Room/Presidential-Speeches/view?articleId=91000.

Baklitskaya, K. (2013, May 24). Irkutsk gets better connected as it links up with Russia's past. *The Siberian Times*. Retrieved from http://siberiantimes.com/business/others/news/irkutsk-gets-better-connected-as-it-links-up-with-russias-past/.

Baozhi, C. (2013, April 1). Finding true north. *Beijing Review*. Retrieved from http://www.bjreview.com/expert/txt/2013-04/01/content_532625_2.htm.

Barnes, T., & Farish, M. (2006). Between regions: science, militarism, and American geography from World War to Cold War. *Annals of the Association of American Geographers,* 96(4), 807–826.

Baudrillard, J. (1994). *Simulacra & Simulation*. Ann Arbor: University of Michigan Press.

BCStats. (2013). Annual data for exports to the world and to the United States by province with selected commodity detail. Retrieved on June 13, 2013 from http://www.bcstats.gov.bc.ca/StatisticsBySubject/ExportsImports/Data.aspx.

Bell, T. (2013, March 10). Portland's new cargo service set to deliver. *Portland Press Herald*. Retrieved from http://www.pressherald.com/news/portlands-new-cargo-service-set-to-deliver_2013-03-10.html?p=3&tc=pg.

Bennett, M. (2012, September 18). South Korea and Norway sign memoranda of understanding on Arctic shipping and shipbuilding. *Foreign Policy Association*. Retrieved from http://foreignpolicyblogs.com/2012/09/18/south-korea-and-norway-sign-memoranda-of-understanding-on-arctic-shipping-and-shipbuilding/.

Berthiaume, L. (2012, March 21). Harper to talk energy, free trade on second Asia visit. *Postmedia News*. Retrieved from http://business.financialpost.com/2012/03/21/harper-to-talk-energy-free-trade-on-second-asia-visit/?__lsa=779c-6ec1.

Bergh, K. (2012). The Arctic policies of Canada and the United States: Domestic motives and international context. *SIPRI Insights on Peace and Security, 1*.

Blatter, J. (2004). From 'spaces of place' to 'spaces of flows'? Territorial and functional governance in cross‐border regions in Europe and North America. *International Journal of Urban and Regional Research,* 28, 530–548.

Bloomberg News. (2013, April 2). Ikea's Ohlsson targets fourfold increase in China stores by 2020. *Bloomberg*. Retrieved from http://www.bloomberg.com/news/2013-04-02/ikea-s-ohlsson-targets-fourfold-increase-in-china-stores-by-2020.html.

Bravo, M. (2009). Arctic science, nation building and citizenship. In F. Abele, T. Courchene, F. Seidle & F. St-Hilare (Eds.), *Northern exposure: Peoples, powers and prospects in Canada's North* (141–168). Montreal: Institute for Research on Public Policy.

Cairncross, F. (2001). *The death of distance: How the communications revolution is changing our lives*. Harvard Business Press.

Calkins, C. (2011, November 30). Link between Russian Far East and Alaska restored. *The New York Times*. Retrieved from http://intransit.blogs.nytimes.com/2011/11/30/link-between-russian-far-east-and-alaska-restored/.

Calder, E. (2012). A Changing Arctic and the Trans-Pacific relationship: American perspectives. *Asia-Pacific Policy Papers Series* 13.

Campbell, C. (2010, February 11). Asian trade essential for Alaska's economy. *Juneau Empire*. Retrieved from http://juneauempire.com/stories/021110/opi_561692730.shtml.

Canadian Geographic. (2011). Hudson Bay. *Protect Your Watershed*. Retrieved June 11, 2013 from http://www.canadiangeographic.ca/watersheds/map/?path=english/watersheds/hudson-bay.

Carothers, T. (1998). The rule of law revival. *Foreign Affairs,* 77(95), 95-106.

Castells, M. (2008). The new public sphere: global civil society, communication networks, and global governance. *The Annals of the American Academy of Political and Social Science,* 616(1), 78–93.

———. (2011). *The rise of the network society: The information age: Economy, society, and culture* (Vol. 1). Oxford: Wiley-Blackwell.

Chaturvedi, S. (2012). Geopolitical transformations: 'rising' Asia and the future of the Arctic Council. In T. Axworthy, T. Koivorova & W. Hasanat (Eds.) *The Arctic Council: its place in the future of Arctic governance* (225-260). Rovaniemi, Finland: The Munk-Gordon Arctic Security Program and the University of Lapland.

Cheong wa dae (Office of the President). (2009). *The national security strategy of the Republic of Korea: The Lee Myung-Bak administration's foreign policy and national security vision*. Seoul: Cheong wa dae (Office of the President).

Chernenko, E. (2013, May 17). Russia eases stance on Arctic, but draws a line in the ice. *Kommersant*. Retrieved from http://www.worldcrunch.com/world-affairs/russia-eases-stance-on-arctic-but-draws-a-line-in-the-ice/china-iceland-norway-finland-canada-arctic/c1s11896/.

China's Snow Dragon conquers the Arctic, opening up an ocean route linking Asia and Europe. (2012, August 19). *The Siberian Times*. Retrieved from http://siberiantimes.com/business/others/news/chinas-snow-dragon-conquers-the-arctic-opening-up-an-ocean-route-linking-asia-and-europe/.

ChinaAbout. (2013, April 12). 12th Five-Year Plan of National Oceanic Development in China. *ChinaAbout*. Retrieved from http://www.chinaabout.net/12th-five-year-plan-national-oceanic-development-china/.

Christoffersen, G. (1994). The Greater Vladivostok Project: Transnational linkages in regional economic planning. *Pacific Affairs,* 67(4), 513–531.

Closing of research stations belies Ottawa's claim that it is protecting the environment [Editorial]. (2013, March 19). Closing of research stations belies Ottawa's claim that it is protecting the environment. *The Globe and Mail*. Retrieved from http://www.theglobeandmail.com/commentary/editorials/closing-of-research-stations-belies-ottawas-claim-that-it-is-protecting-the-environment/article9940694/.

Coates, K., & Hara, K. (2013). Park the paranoia. *Policy Options,* April-May, 23–28.

Coe, N., Hess, M., Wai-chung Yeung, H., Dicken, P., & Henderson, J. (2004). 'Globalizing' regional development: a global production networks perspective. *Transactions of the Institute of British Geographers,* 29(4), 468–484.

Conference reports and announcements. (2011). *The Polar Journal,* 1(1), 143–147.

Connery, C. (1994). Pacific Rim Discourse : The U.S. Global Imaginary in the Late Cold War Years. *boundary 2,* 21(1), 30–56.

Craciun, A. (2009). The Scramble for the Arctic. *Interventions,* 11(1), 103–114.

———. (2012). Writing the Disaster: Franklin and Frankenstein. *Nineteenth-Century Literature,* 65(4), 433–480.

———. (2012, May). The Franklin Mystery. *Literary Review of Canada*. Retrieved from http://reviewcanada.ca/essays/2012/05/01/the-franklin-mystery/.

Cullinane, K., & Song, D.W. (1998). Container terminals in South Korea : problems and panaceas. *Maritime Policy & Management,* 25(1), 63–80.

Cumings, B. (2005). *Korea's place in the sun: A modern history (Updated)*. New York: W.W. Norton.

Curtin, P. (1984). *Cross-cultural trade in world history*. Cambridge; New York: Cambridge University Press.

Deleuze, G., & Guattari, P. F. (1987). *Thousand plateaus: capitalism and schizophrenia* (Vol. 2). Minneapolis: University of Minnesota Press.

DNV. (2012, May 14). Norway Day at World Expo in South Korea. *World Maritime News*. Retrieved from http://worldmaritimenews.com/archives/54783/norway-day-at-world-expo-in-south-korea/.

Dodds, K. (2012). Anticipating the Arctic and the Arctic Council: pre-emption, precaution and preparedness, *Polar Record*, 1–11.

Dodds, K., & Ingimundarson, V. (2012). Territorial nationalism and Arctic geopolitics: Iceland as an Arctic coastal state. *The Polar Journal,* 2(1), 37–41.

Duyvendak, J. (1938). The true dates of the Chinese maritime expeditions in the early fifteenth century. *T'oung Pao, 34*, *1*(5), 341-412.

Ebinger, C., & Zambetakis, E. (2009). The geopolitics of Arctic melt. *International Affairs,* 85(6), 1215–1232.

Eimskip. (2013, February 11). Portland, Maine will replace Norfolk, Virginia as a port of call [Press release]. Retrieved from http://eimskip.is/news/Portland,-Maine-will-replace-Norfolk,-Virginia-as-a-port-of-call.html.

Einarsson, N., Larsen, J., Nilsson, A., & Young, O. (2004). *AHDR (Arctic Human Development Report)*. Akureyri: Steffanson Arctic Institute.

Emmerson, C. (2011). *The future history of the Arctic*. New York: Vintage.

Eom, S. (2011). The Arctic fisheries regime and its implications to Korea. *KMI International Journal of Maritime Affairs and Fisheries,* 3(1), 33–48.

Ermashev, L. (1947). 'Polyarnya Strategiya' i polyarnya ekspansiya. Moscow.

Etkind, A. (2011). Barrels of fur: Natural resources and the state in the long history of Russia. *Journal of Eurasian Studies,* 2(2), 164–171.

Fairhall, D. (1971). *Russia looks to the sea: a study of the expansion of Soviet maritime power*. London: Deutsch.

Ferguson, J. (1999). *Expectations of modernity: Myths and meanings of urban life on the Zambian Copperbelt*. Berkeley: University of California Press.

Fingar, C. (2008). *Global trends 2025: A transformed world*. Washington, DC: Government Printing Office. Retrieved from http://www.dni.gov/nic/PDF_2025/2025_Global_Trends_Final_Report.pdf

Foreign Affairs and International Trade Canada. (2013, May 16). Canada's Arctic Council chairmanship. *Canada and the Arctic*. Retrieved June 11, 2013 from http://www.international.gc.ca/arctic-arctique/chairmanship-presidence.aspx?lang=eng.

Fortescue, M. (1998). *Language relations across the Bering Strait: Reappraising the archaeological and linguistic evidence*. London: Continuum.

Frankel, E. (1988). Arctic Marine Transport and Ancillary Technologies. In C. Lamson & D. VanderZwaag (Eds.), *Transit management in the Northwest Passage: Problems and prospects* (100-129). Cambridge: University of Cambridge Press.

Gazprom. (2012, December 5). Gazprom successfully completes world's first LNG supply via Northern Sea Route [Press release]. Retrieved from http://www.gazprom.com/press/news/2012/december/article150603/.

———. (2013a). *LNG*. Retrieved June 12, 2013, from http://www.gazpromexport.ru/en/strategy/lng/

———. (2013b). *Sakhalin-2*. Retrieved June 12, 2013 from http://www.gazpromexport.ru/en/projects/2/

Gilbert, A. (1988). The new regional geography in English and French-speaking countries. *Progress in Human Geography,* 12, 208–228

Gill, B., & Reilly, J. (2010). The tenuous hold of China Inc. in Africa. *The Washington Quarterly,* 30:3, 37-52.

Goldstein, L., & Kozyrev, V. (2006). China, Japan and the scramble for Siberia. *Survival,* 48(1), 163–178.

Gough, C., & Shackley, S. (2001). The respectable politics of climate change: The epistemic communities and NGOs. *International Affairs,* 77(2), 329–346.

Grotius, H. (1964). 1625. De jure belli ac pacis. *Trans. as The Law of War and Peace, FW Kelsey (ed.). New York: Oceana*.

Guo, P. (2012). An analysis of new criteria for permanent observer status on the Arctic Council and the road of non-Arctic states to Arctic. *KMI International Journal of Maritime Affairs and Fisheries,* 4(2): 21–38.

Hansen, P. L. (2013, March 18). *Arctic policy/strategy of Kingdom of Denmark*. Speech presented at the Korea Polar Research Institute's International Symposium on Arctic Research and Policy at the Koreana Hotel, Seoul, Korea.

Haraway, D. J. (1997). *Modest– Witness@ Second– Millennium. FemaleMan– Meets– OncoMouse: Feminism and Technoscience*. New York: Psychology Press.

Harvey, D. (1989). *The condition of postmodernity* (Vol. 14). Oxford: Blackwell.

Healey, P. (2004). The treatment of space and place in the new strategic spatial planning in Europe. *International Journal of Urban and Regional Research,* 28(1), 45–67.

Heith, A. (2007). Fluid identities and the use of history: The Northern Lights Route and the writings of Bengt Pohjanen in J. Fornäs & M. Fredriksson (Eds.), *Inter. A European Cultural Studies Conference in Sweden 11-13 June 2007* (227-241). Linköping: Linköping University Electronic Press.

Higgins, A. (2013, March 22). Teeing off at the edge of the Arctic? A Chinese plan baffles Iceland. *The New York Times*. Retrieved from http://www.nytimes.com/2013/03/23/world/europe/iceland-baffled-by-chinese-plan-for-golf-resort.html?pagewanted=all&_r=0

Hong, N. (2012). The melting Arctic and its impact on China's maritime transport. *Research in Transportation Economics,* 35(1), 50–57.

Horensma, P. (1991) *The Soviet Arctic*. London and New York: Routledge.

Huebert, R. (1998). New directions in circumpolar cooperation: Canada, the Arctic Environmental Protection Strategy, and the Arctic Council. *Canadian Foreign Policy Journal*, 5(2), 37–57.

Hyde, M. (2001). Putin's federal reforms and their implications for presidential power in Russia. *Europe-Asia Studies,* 53(5), 719–743.

IPCC. (2012). *Managing the risks of extreme events and disasters to advance climate change adaptation. A special report of Working Groups I and II of the intergovernmental panel on climate change*. Cambridge, UK, and New York NY, USA.

ITK. (2009, October 24). Climate Change: European Development Days. Retrieved June 11, 2013 from https://www.itk.ca/front-page-story/climate-change-european-development-days.

Jakobson, L. (2010). China prepares for an ice-free Arctic. *SIPRI Insights on Peace and Security*, 2.

Jakobson, L. & Lee, S. (2013). *The North East Asian States' interests in the Arctic and possible cooperation with the Kingdom of Denmark*. Stockholm: Stockholm International Peace Research Instititue.

JAXA. (2013, January 31). The JAXA Astronauts 20th Anniversary Symposium – Japanese Astronauts Discuss 20 Years of Progress and Future Prospects. Retrieved June 11, 2013 from http://www.jaxa.jp/article/special/space_exploration/astrosym01_e.html.

Kerr, D. (1995). The new Eurasianism: The rise of geopolitics in Russia's foreign policy. *Europe-Asia Studies,* 47(6), 977–988.

Kim, Y., & Blank, S. (2011). The Arctic: A new issue on Asia's security agenda. *Korean Journal of Defense Analysis,* 23(3), 303–320.

Kira, S. (2012). Meeting between the Swedish Chairmanship of the Arctic Council and observers/ad-hoc observers. Retrieved on June 12, 2013 from http://www.mofa.go.jp/announce/svm/pdfs/statement121108.pdf.

Konishi, W., & Manyin, M. (2009, September 30). *South Korea: Its domestic politics and foreign policy outlook* (Congressional Report No. 7-5700). Washington DC: Library of Congress Congressional Research Service. Retrieved from Open CRS website: http://assets.opencrs.com/rpts/R40851_20090930.pdf.

KOPRI. (2012). Greetings. *About KOPRI*. Retrieved June 11, 2013, from http://eng.kopri.re.kr/home_e/contents/e_1100000/view.cms.

———. (2013). History. *About KOPRI*. Retrieved June 11, 2013 from http://eng.kopri.re.kr/home_e/contents/e_1300000/view.cms

The Republic of Korea. (2011). Korea's Third National Communication under the United Nations Framework Convention on Climate Change: Low carbon, green growth. Retrieved from http://unfccc.int/resource/docs/natc/kornc3.pdf.

Kuehls, T. (1996). *Beyond Sovereign Territory: The Space of Ecopolitics*. Minneapolis: University of Minnesota Press.

Kurtenbach, E. (2013, April 28). Japan puts aside Russia row for sake of economy. *The Guardian*. Retrieved from http://www.guardian.co.uk/world/feedarticle/10767664.

Lackenbauer, P. (2010). Mirror images? Canada, Russia, and the circumpolar world. *International Journal,* 65, 879–898.

Lampton, D. M. (2008). *The three faces of Chinese power* (Vol. 1). Berkeley: University of California Press.

Large, D. (2007). Beyond 'dragon in the bush': The study of China Africa relations. *African Affairs,* 107(426), 45–61.

Larsen, H. (2005). *Environmental spaces: a geopolitics of environmental interdependence in the Baltic Sea area*. Copenhagen: Institute of Geography, University of Copenhagen.

Lasserre, F. (2003). The Amur River border: A once symbol of conflict turned into a water resource stake. *Cybergeo, Revue Europeenne de Geographie*, (242), 1-37.

———. (2010). China and the Arctic: Threat or cooperation potential for Canada? *Canadian International Council, China Papers 11*. Retrieved from http://www.onlinecic.org/resourcece/archives/chinapapers.

Lasserre, F., & Pelletier, S. (2011). Polar super seaways? Maritime transport in the Arctic: an analysis of shipowners' intentions. *Journal of Transport Geography,* 19(6), 1465–1473.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge: Harvard University Press.

Lee, B. (2013, January 21). *Korea's Arctic policy - A Korean route towards the Arctic frontier. Speech presented at the Arctic Frontiers Conference*, Tromsø, Norway. Retrieved from http://www.arctic-frontiers.com/index.php?option=com_docman&task=doc_download&gid=714&Itemid=306.

Lee, D.S., Park, H., Cho, J., & Kim, J. (2013). Opportunities of Arctic development. *Samsung Economic Research Institute*, April, 9–13.

Lee, S., & Yoo, S. (1987). Management style and practice of Korean chaebols. *California Management Review,* XXIX(4), 95–110.

Lee, T. (1996). *Shipping developments in Far East Asia: The Korean experience*. Aldershot, UK: Avebury.

Lehti, M. (2003). Transformation from progressive Nordics to reluctant Europeans. *Geopolitics,* 8(1), 211–218.

Leitner, H, Sheppard, E., & Sziarto, K. (2008). The spatialities of contentious politics. *Transactions of the Institute of British Geographers,* 33(2), 157–172.

Lewis, E. L., & Jones, E. P. (2000). *The freshwater budget of the Artic Ocean* (Vol. 70). Dordrech, Netherlands: Kluwer Academic Publishers.

Leydesdorff, L., & Zhou, P. (2005). Are the contributions of China and Korea upsetting the world system of science? *Scientometrics,* 63(3), 617–630.

Liang, L. H. (2012, July 20). South Korea pledges $3 billion to offshore and Arctic shipping research. *Sea Trade Communications Limited*. Retrieved from http://www.seatrade-global.com/news/asia/south-korea-pledges-$3bn-to-offshore-and-arctic-shipping-research.html.

Macalister, T. (2013, March 15). Greenland government falls as voters send warning to mining companies. *The Guardian*. Retrived from http://www.guardian.co.uk/world/2013/mar/15/greenland-government-oil-mining-resources

Mackinder, H. (1904). The geographical pivot of history. *The Geographical Journal,* 23(4), 421–437.

MacKay, D. (1970). *The honourable company: a history of the Hudson's Bay Company*. Freeport, NY: Books for Libraries Press.

Macleod, G., & Jones, M. (2007). Territorial, scalar, networked, connected: In what sense a 'Regional World'? *Regional Studies,* 41(9), 1177–1191.

Manicom, J. (2013). Identity politics and the Russia-Canada continental shelf dispute: An impediment to cooperation? *Geopolitics,* 18(1), 60–76.

Manicom, J., & Lackenbauer, P. (2013). East Asian states, the Arctic Council, and international relations in the Arctic. *CIGI Policy Brief,* April 2013 (26).

Mansfield, B. (2001). Thinking through scale: the role of state governance in globalizing North Pacific fisheries. *Environment and Planning A,* 33(10), 1807–1827.

Massey, D. (1991). A global sense of place. *Marxism Today,* 38, 24-29.

McNicol, T. (2008, August 13). Arctic ice is decreasing? Wildlife crisis of Shiretoko. *Nashojio*. Retrieved from http://www.nationalgeographic.co.jp/news/news_article.php?file_id=81046260.

Mills, W. J. (2003). *Exploring polar frontiers: a historical encyclopedia*. Santa Barbara: ABC-CLIO.

Ministry for Foreign Affairs. (2013, April 15). Iceland first European country to sign free trade agreement with China. *Ministry for Foreign Affairs*. Retrieved June 11, 2013 from http://www.mfa.is/foreign-policy/trade/free-trade-agreement-between-iceland-and-china/.

Ministry of Economic Development. (2007) *British Columbia Asia Pacific Initiative*. Vancouver, BC. Retrieved June 11, 2013 from http://www.gov.bc.ca/jtst/api.html.

Ministry of Foreign Affairs of Japan. (2013, March 21). Press conference by Deputy Press Secretary/Deputy Director-General for Press and Public Diplomacy Naoko Saiki. *Information and Culture*. Retrieved June 11, 2013 from http://www.mofa.go.jp/press/kaiken/kaiken26e_000002.html.

Murphy, Z. (2010, July 28). Zheng He: Symbol of China's 'peaceful rise.' *BBC News*. Retrieved from http://www.bbc.co.uk/news/world-asia-pacific-10767321.

Narod. (n.d.). Russia will heat America, but Japan will get Sakhalin's LNG first. Retrieved June 11, 2013 from http://sk-ornament.narod.ru/bnews/econ1177.html.

NASA. (2009, February 11). Northern Hokkaido, Japan. *NASA's Visible Earth*. Retrieved June 11, 2013 from http://visibleearth.nasa.gov/view.php?id=37225.

National Institute of Polar Research. (n.d.). Arctic Research. Retrieved June 11, 2013 from http://www.nipr.ac.jp/aerc/e/arctic_english.pdf.

Naylor, S., Siegert, M, Dean, K., & Turchetti, S. (2008). Science, geopolitics and the governance of Antarctica. *Nature Geoscience,* 1(3), 143–145.

Neumann, I. (1994). A region-building approach to Northern Europe. *Review of International Studies,* 20(1), 53–74.

NOAA. (2013). Alaska Pollock. *Fishwatch 2013*. Retrieved June 11, 2013 from http://www.fishwatch.gov/seafood_profiles/species/pollock/species_pages/alaska_pollock.htm.

Norsk Industri. (2012). Situasjonen i eksportmarkedene. Retrieved November 4, 2012 from http://www.norskindustri.no/eu-internasjonalt/situasjonen-i-eksportmarkedene-article6103-.

NorthwesTel. (2013). History: First in the North. *About NorthwesTel*. Retrieved June 11, 2013 from http://www.nwtel.ca/about-northwestel/history-first-in-the-north.

Norwegian Ministry of Foreign Affairs. (2011). *The High North: Visions and Strategies*. Oslo, Norway: Norwegian Ministry of Foreign Affairs.

Nye, D. E. (1996). *American technological sublime*. Cambridge: MIT Press.

O'Loughlin, J., & van der Wusten, H. (1990). Political geography of panregions. *Geographical Review*, 90(1), 1–20.

Offshore Technology. (n.d.). Goliat Oil and Gas Field, Barents Sea, Norway. Retrieved June 12, 2013 from http://www.offshore-technology.com/projects/goliat/.

Okada, K. (2008, November 7). Japan asked to join new Arctic shipping regime. *Japan Times*. Retrieved from http://www.japantimes.co.jp/news/2008/11/07/national/japan-asked-to-join-new-arctic-shipping-regime/#.UbGZ5_ZASWk.

Okawara, N., & Katzenstein, P. (2010). Japan and Asian-Pacific security: Regionalization, entrenched bilateralism and incipient. *The Pacific Review,* 14(2), 37–41.

Oslund, K. (2005). The North begins inside: Imagining Iceland as wilderness and homeland. *GHI Bulletin,* 36, 91–99.

Paasi, A. (1996). *Territories, boundaries, and consciousness: The changing geographies of the Finnish-Russian boundary*. New York: J. Wiley & Sons.

Park, J. (2013, May 8). Korea catches shipbuilding's next big wave. *JoongAng Daily*. Retrieved from http://koreajoongangdaily.joinsmsn.com/news/article/article.aspx?aid=2971236&cloc=joongangdaily%7Chome%7Cnewslist1.

Park, K. (2012, July 2). South Korea shipbuilders to post first export drop in 19 years. *Bloomberg*. Retrieved from http://www.bloomberg.com/news/2012-07-02/south-korea-shipbuilders-to-post-first-export-drop-in-19-years.html.

PetroChina. (2012, May 16). PetroChina and international energy firms lanch LNG Canada. Retrieved June 11, 2013 from http://www.petrochina.com.cn/Ptr/News_and_Bulletin/News_Release/PetroChina_and_International_Energy_Firms_Launch_LNG_Canada.htm?COLLCC=1229870142&.

Piepenburg, D. (2008). As time goes by: *Polar Biology* over the years 1982–2008. *Polar Biology,* 32(1), 3–7.

Powell, R. (2011). From the northern dimension to Arctic strategies? The European Union's envisioning of the high latitudes. In L. Bialasiewicz (Ed.), *Europe in the world: EU geopolitics and the making of European Space* (105-126). Farnham and Burlington, VT: Ashgate.

Pratt, M. L. (2008). *Imperial eyes: Travel writing and transculturation*. London: Taylor & Francis.

Pred, A. (1986). *Place, practice and structure: social and spatial transformation in southern Sweden: 1750-1850*. Cambridge: Polity Press.

Putin deplores collapse of USSR. (2005, April 25). *BBC News*. Retrieved from http://news.bbc.co.uk/1/hi/4480745.stm.

Putin, V. (2009, October 13). "We can position Vladivostok as Russia's 'gateway to the Pacific.'" http://www.rzd-partner.com/press/346539/

Ratti, R., & Reichman, S. (Eds.). (1993). *Theory and practice of transborder cooperation*. Munich: Helbing & Lichtenhahn.

Ravenhill, J. (2002). *APEC and the construction of Pacific Rim regionalism*. Cambridge: Cambridge University Press.

Reuters. (2013, April 2). Technip, JGC win tender to build Yamal LNG plant. *The Moscow Times*. Retrieved from http://www.themoscowtimes.com/business/article/technip-jgc-win-tender-to-build-yamal-lng-plant/477788.html.

Rietveld, P., & Nijkamp, P. (1992). Transport and Regional Development. *Serie Research Memoranda* 50.

Rodrigue, J., and Browne, M. (2002). International Maritime Freight Transport and Logistics. In R.D. Knowles, J. Shaw & I. Docherty (Eds), *Transport geographies: An introduction* (156–178). London: Blackwell.

Roos, J., Brackley, A., & Sasatani, D. (2011). USDA *trends in global shipping and the impact on Alaska's forest products*. Portland: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Rozman, G. (2008). Strategic thinking about the Russian Far East: A resurgent Russia eyes its future in Northeast Asia. *Problems of Post-Communism,* 55(1), 36–48.

———. (2011). Chinese strategic thinking on multilateral regional security in Northeast Asia. *Orbis,* 55(2), 298–313.

Sack, R. (1986). *Human territoriality: its theory and history* (Vol. 7). Cambridge University Press.

Sakhuja, V. (2013, January 24). *India and the changing Arctic. Speech presented at the Arctic Frontiers Conference,* Tromsø, Norway. https://arcticfrontiers.conference-services.net/reports/template/onetextabstract.xml?xsl=template/onetextabstract.xsl&conferenceID=3325&abstractID=711993.

Schottenhammer, A. (2012). The 'China Seas' in world history: A general outline of the role of Chinese and East Asian maritime space from its origins to c. 1800. *Journal of Marine and Island Cultures,* 1(2), 63–86.

Schweitzer, P., & Golovko, E. (1995). Traveling between continents: The social organization of interethnic contacts across Bering Strait. *Anthropology of East Europe Review,* 13(2), 50–55.

Scrivener, D. & Gorbachev, M. S. (1989). *Gorbachev's Murmansk speech: the Soviet initiative and Western response*. Norwegian Atlantic Committee.

Sheldon, J. (1989). Across the ice curtain: Alaska–Siberia visits, 1988. *Polar Record,* 25(154), 219–222.

Sheppard, E. (2002). The spaces and times of globalization: place, scale, networks, and positionality. *Economic Geography,* 78(3), 307–330.

Shuvalov invites Japan to build 10km Sakhalin bridge. (2013, May 1). *The Moscow Times*. Retrieved from http://www.themoscowtimes.com/business/article/shuvalov-invites-japan-to-build-10km-sakhalin-bridge/479514.html

Sinha, U. (2013). The Arctic: An antithesis. *Strategic Analysis,* 37(1), 34–39.

Slezkine, Y. (1994). *Arctic mirrors: Russia and the small peoples of the North*. Ithaca: Cornell University Press.

Smithsonian Arctic Studies Center. (2013). Archaelogists study early whaling community in Quebec, Canada. *Ocean Portal*. Retrieved June 11, 2013 from http://ocean.si.edu/ocean-news/archaeologists-study-early-whaling-community-quebec-canada

Snyder, S. (2012, December 18). South Korea's presidential stakes. *South Korea*. Retrieved June 11, 2013 from http://www.cfr.org/south-korea/south-koreas-presidential-stakes/p29685.

Sörlin, S. (2006). Science, empire, and enlightenment: Geographies of northern field science. *European Review of History,* 13(3), 455–472.

State Oceanic Administration. (2013, June 8). 世界海洋日暨全国海洋宣传日主场活动在锦州举行. Retrieved June 11, 2013, from http://www.soa.gov.cn/xw/hyyw_90/201306/t20130608_25799.html 550.html.

Statistics Canada. (2012). Vancouver, British Columbia (Code 933) and British Columbia (Code 59) (table). Census profile. *2011 Census*. Ottawa: Statistics Canada. Retrieved from http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E.

Steinberg, P. (1999). The maritime mystique: sustainable development, capital mobility, and nostalgia in the world ocean. *Environment and Planning D: Society and Space,* 17(4), 403–426.

———. (2001). *The social construction of the ocean* (Vol. 78). Cambridge: Cambridge University Press.

Suárez de Vivero, J., Mateos, J. & Florido del Corral, D. (2009). Geopolitical factors of maritime policies and marine spatial planning: State, regions, and geographical planning scope. *Marine Policy,* 33(4), 624–634.

Summerhayes, C. (2008). International collaboration in Antarctica: the International Polar Years, the International Geophysical Year, and the Scientific Committee on Antarctic Research. *Polar Record,* 44(04), 321–334.

Swyngedouw, E. (2000). Authoritarian governance, power, and the politics of rescaling. *Environment and Planning D: Society and Space,* 18(1), 63–76.

———. (2004). Globalisation or 'glocalisation'? Networks, territories and rescaling. *Cambridge Review of International Affairs,* 17(1), 25–48.

Taylor, P. J. (1991). A theory and practice of regions: the case of Europes. *Environment and Planning D: Society and Space*, *9*(2), 183-195.

The Arctic. (n.d.). In *Wikipedia*. Retrieved June 6, 2011, from Retrieved June 6, 2011, from http://en.wikipedia.org/wiki/Arctic.

北極 (The Arctic). (n.d.). In *Wikipedia*. Retrieved June 6, 2011, from http://ja.wikipedia.org/wiki/%E5%8C%97%E6%A5%B5.

북극(The Arctic). (n.d.). In *Wikipedia*. Retrieved June 6, 2011, from http://ko.wikipedia.org/wiki/%EB%B6%81%EA%B7%B9.

北极地区 (The Arctic). (n.d.). In *Wikipedia*. Retrieved June 6, 2011, from http://zh.wikipedia.org/wiki/%E5%8C%97%E6%9E%81%E5%9C%B0%E5%8C%BA.

The Economist. (2007, January 18). A cold coming we had of it. *The Economist*. Retrieved from http://www.economist.com/node/8570527.

Three Soviet ships to take on wheat in Hudson Bay. (1966, August 23). *The Montreal Gazette*. Retrieved from http://news.google.com/newspapers?nid=1946&dat=19660823&id=bMQtAAAAIBAJ&sjid=r58FAAAAIBAJ&pg=5791,4016488.

The Northern Forum. (n.d.). History. *The Northern Forum*. Retrieved on June 11, 2013 from http://www.northernforum.org/servlet/content/history.html.

Thompson, P. (2006). Patent citations and the geography of knowledge spillovers: evidence from inventor-and examiner-added citations. *The Review of Economics and Statistics*, *88*(2), 383-388.

Toke, D. (1999). Epistemic communities and environmental groups. *Politics,* 19(2), 97–102.

Tonami, A., & Watters, S. (2012). Japan's Arctic policy: The sum of many parts. *Arctic Yearbook 2012*, 1, 93–103.

Trofimenko, H. (1989). Long-term trends in the Asia-Pacific region: a Soviet evaluation. *Asian Survey,* 29(3), 237–251.

Turck, T. J., & Turck, D. L. (1992). Trading posts along the Yukon River: Noochuloghoyet trading post in historical context. *Arctic*, 45(1), 51-61.

University of Alaska Department of Languages. (2013, June 2). Why study Russian at UAA? *Russian*. Retrieved June 11, 2013, from http://www.uaa.alaska.edu/languages/language-programs/russian/.

University of the Arctic. (2009). Arctic boundaries. *Defining the Arctic*. Retrieved on 26 May 2013 from http://www.uarctic.org/atlasmaplayer.aspx?m=642&amid=5955.

Vanderklippe, N. (2011, April 19). South Koreans eye Arctic LNG shipments. *The Globe and Mail*. Retrieved from http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/south-koreans-eye-arctic-lng-shipments/article597537/.

Volkov, K. (2013, April 25). Japanese prime minister comes to Moscow. *Izvestia*. Retrieved from http://rbth.asia/politics/2013/04/26/japanese_prime_minister_comes_to_moscow_46465.html.

Wagner, C., & Leydesdorff, L. (2005). Mapping global science using international co-authorships: A comparison of 1990 and 2000. *International Journal of Technology and Globalisation,* 1(2), 185–208.

Wahn, I. (1973). Toward Canadian identity: the significance of foreign investment. *Osgoode Hall Law Journal,* 11(3), 517–535.

Wallerstein, I. (1979). *The capitalist world-economy* (Vol. 2). Cambridge University Press.

Want China Times. (2012, August 25). Missing the boat: Chinese shipyards missing orders. *Want China Times*. Retrieved from http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20120825000001&cid=1502.

Watters, S., & Tonami, A. (2012). Singapore: An emerging Arctic actor. *Arctic Yearbook 2012*, 1, 105–114.

Wells, A. (1986). The North Atlantic and Arctic Theatres of Operations. In J. George (Ed.), *The Soviet and Other Communist Navies: The View from the Mid-1980s*. Annapolis: Naval Institute Press.

Williams, J. (2003). *Gilles Deleuze's difference and repetition: A critical introduction and guide* (p. 153). Edinburgh: Edinburgh University Press.

Wilson Rowe, E. (2012). International science, domestic politics: Russian reception of international climate-change assessments. *Environment and Planning D: Society and Space,* 30(4), 711–726.

Won, D. H. (2010). *A study of Korean shipbuilders' strategy for sustainable growth* (Doctoral dissertation, Massachusetts Institute of Technology).

World Meteorological Organization. (2011, March 28). Summary of International Polar Year [Press release]. Retrieved from https://www.wmo.int/pages/mediacentre/press_releases/pr_911_en.html.

Wright, D. (2011). *The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China*. Number 8. Newport, Rhode Island: Naval War College, China Maritime Studies Institute.

Wright, R. (2013, May 15). LNG: Shipments to Asia remain lucrative line. *Financial Times*. Retrieved from http://www.ft.com/cms/s/0/7b091fec-b0d5-11e2-9f24-00144feabdc0.html#axzz2V3hBVPlw.

Xinhua. (2013, January 14). 揭开北极地区神秘面纱　北极探秘纪录片将面世 (Uncover the mystery of the Arctic: Arctic Quest documentary will be available). *Xinhua*. Retrieved from http://stock.xinhua08.com/a/20130114/1106231.shtml?f=arelated.

Yang, H. (2012). Development of China's polar linkages. *Canadian Naval Review,* 8(3), 30–32.

Yonhap, (2013, September 21). Korea's Coast Guard to send helicopter to Arctic region. *Yonhap*. Retrived from http://www.koreatimes.co.kr/www/news/nation/2012/09/117_120582.html

Young, O. (2005). Governing the Arctic: From Cold War theater to mosaic of cooperation. *Global Governance,* 11, 9–15.

Zellen, B. (2009). *Arctic doom, Arctic boom: the geopolitics of climate change in the Arctic*. Westport: Praeger Publishers.

Zhao, J. (2013, January 21). *China and the High North. Speech presented at the Arctic Frontiers Conference,* Tromsø, Norway. Retrieved June 13, 2013 from http://www.arctic-frontiers.com/index.php?option=com_docman&task=doc_download&gid=713&Itemid=306.

Zheng, Y., & Tok, S. (2007). 'Harmonious Society' and 'Harmonious World': China's Policy Discourse under Hu Jintao. *Briefing Series (University of Nottingham),* 44(26). Retrieved from http://nottingham.ac.uk/cpi/documents/briefings/briefing-26-harmonious-society-and-harmonious-world.pdf.

Zhenghua, W. (2013, June 6). China to build research center for Arctic region. *China Daily*. Retrieved from http://europe.chinadaily.com.cn/china/2013-06/06/content_16573303.htm.

Zhou, P., & Leydesdorff, L. (2006). The emergence of China as a leading nation in science. *Research Policy,* 35(1), 83–104.